Improving COLLEGE AND UNIVERSITY *Teaching*

Editorial:
"What Is All This Worth?"
The Editor's Uneasy Chair

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EVALUATION

"The most important science of all is the science of choice."

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The Editor's Uneasy Chair

The editor is disturbed at the moment, as teacher and on behalf of teachers. Dr. Ordway Tead in his article in this issue on "The Evaluative Point of View" discusses the development of the creativity of students and its outlet in the individual's chosen occupation.

"The outward evidence of inward concern"

He says: "Hopefully creativity can more and more manifest itself in *work* activities, where the individual in return for his livelihood may make his central social contribution. Indeed this is a possible and desirable situation of the highest moral consequence. For if we ask, as well we may, what *is* this moral conduct that is the outward evidence of inward concern for moral values, the basic answer may well be: *the most important moral value to espouse is the achieving of the greatest possible creativity in the work contribution that one makes to society.* One's job can be one of the most significant and rewarding mediums for expressing moral values."

I hope we all accept the responsibility to espouse the concept of creativity in one's job as a most important moral value for anybody. And if this is something we foster for our students, how about ourselves as teachers? Teaching is our job. Should not we in our own teaching careers manifest "the outward evidence of our inward concern" for moral values? Would not this be the "higher teaching" at its best?

Top level living is undoubtedly the essential basis for top level teaching, and both are characterized by dedication to values. If in our own living we are concerned with criteria of choice, the relationships of ends and means, and the importance of respect for self and for other human beings (including our students) as unique individuals each with a unique calling in the human scheme, we will be alert to values in the teaching-learning process. Not solely noble and abstract values, but practical values in all aspects of the day by day and year by year learnings of our students under our responsible teaching. Great teachers have been revered, not always for their technique, but notably for their personal qualities and their vision of the meaning of life. Life and teaching properly are concerned ceaselessly with discrimination between the trivial and the great.

Editorial—

"What Is All This Worth?"

MANY A PROFESSOR—at a time of discouragement or disillusionment, or personal or economic crisis, or of physical or nervous fatigue—has confronted his teaching job—its struggling past, baffling present, and dubious future—and put to himself the desperate question, *"What is all this worth?"*

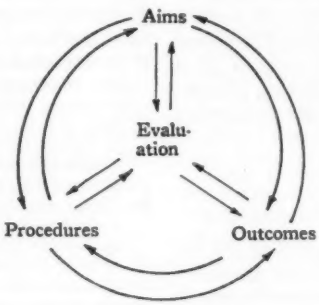
This appears to be almost the ultimate in searching questions. Yet it really is not, as Webster called it, a "miserable interrogatory," but rather a question that should be asked oftener, and courageously. It is the key to all EVALUATION when adequately conceived and performed.

We should, in fact, ask this question regularly, not only about our teaching but in our very lives. They are too important and precious to be conducted without penetrating evaluation. Our teaching careers and our teaching itself similarly demand regular critical inquiry into their worth.

Indeed, whether we think about it or not, our lives involve a continuous process of evaluation. Human love of freedom is basic. We need freedom of choice or we sink to a subhuman level. Adam and Eve, even before they ate the fruit of the tree of knowledge of good and evil, had the freedom to eat or not to eat. We make choices moment by moment—to speak or be silent, to smile or frown, to do or not to do. Often there is a host of possible subchoices in every category of choice. Each choice, whether made with scarcely conscious thought or after deliberation, bears for us at least a higher value label than the alternatives. We go through life as it were affixing value labels.

We set teaching goals (aims), consciously or unconsciously choosing these in preference to other possible goals. We choose materials and methods (procedures) as the means of achieving our goals. That is, we put preferential value on the aims and procedures we choose.

Our students similarly make choices constantly. They set aims for themselves—adequate ones like "understanding the evolution of multicellular forms" or specious ones like "playing up to teacher" or "getting a passing mark." They choose sound procedures such as "reading, thinking, summarizing" or poor procedures such as "cramming at the last minute" or "borrowing Joe Grind's notes."



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by Delmer M. Goode

All these choices, teachers' and students', are evaluative.

Commonly we think of evaluation as end-product evaluation. "The proof of the pudding is in the eating" seems a sound adage, but it is hardly a principle for professional operation. How can end-product evaluation, the evaluation of OUTCOMES, be adequate unless it looks critically back at the AIMS that were set and the PROCEDURES that were used? And is it not proper to evaluate aims and procedures in advance as well as in retrospect?

Evaluation by its nature permeates the interaction of aims, procedures, and outcomes in the teaching-learning process. "What is all this worth?" is a comprehensive question involving each factor in the process, the interaction of the factors, and the total process itself.

And we cannot escape it. Not only do we keep on making choices—evaluating automatically or deliberately—but our choices declare themselves and us. Our teaching like our living reveals our worth.

The Evaluative Point of View

The linking of evaluation with values in this issue is no mere play on words. If question arises whether evaluation is not as big and as continuous as teaching—as, in fact, with living itself—the articles that follow should give sufficient answer. The author of the following article (A.B., Amherst; Litt.D., L.H.D.) is a national figure so well known as to need no introduction, particularly to readers of this journal of which he has been a friend from its beginning, contributing frequent articles and serving as a member of the Editorial Advisory Board. The article is taken from an address at the University of Kentucky.

By ORDWAY TEAD

THE DRAMA of the Book of Job spelled out for all time the falsity of the view, "Be good and you'll be happy." It pointed away from the search for happiness as a wise ultimate life purpose. The ringing statement of Job, "though He slay me, yet will I trust in Him," has historically suggested a corrective focus.

Any constructive discussion of the place of moral and spiritual values in education demands a mood of courage, confidence, positive zest, and a virility which accepts the need for struggle, sacrifice, and renunciation—all on the premise that education has its contribution to the end that we purpose to have life and have it more abundantly in a kingdom of growing righteousness where the good life can be realized.

Our search in the affirming of values is not for some will o' the wisp called happiness, but rather to consider what education can mean for the impassioned and purposive venture of courageous living: productivity and love in human relations, strivings for creativity in which the cost is not counted, outpourings of affection and sacrificial loyalty to what are regarded as life's ultimates, more valuable than any one individual's human life as Job had the spiritual wisdom to articulate.

We are not in value inculcation concerned with petty personal vices—unless they are tell tale hints of deeper shortcomings. Our concern is with the basic convictions, motives to action, and attitudes of commitment with which each individual's education is preoccupied. Our purpose is that each self come in his own terms to a personal way of life which is to be creative, loving, rational, community minded, and esthetically sensitized.

It seems pertinent to take off from the interesting, albeit somewhat negative, findings of Professor Philip E. Jacob's recent book, "Changing Values in College"[1] a study of the degree to which various causative factors may have worked toward improvement in the value outlooks of college students. The expected and obvious factors seem to have had little effect toward beneficial changes:

- Even fundamental revisions of the formal context of the curriculum designed to confront students most forcefully with problems of personal and social conduct and to involve them in searching examination of value-issues, rarely appear to have brought about a marked difference in students' beliefs and judgments, let alone their actual patterns of conduct.
- The personality, skill and devotion of teachers to their students and their subjects varies tremendously within and among institutions. So do their personal and educational philosophies, the intensity of their value-commitments, and the degree to which they deliberately pursue value-goals in class and outside.
- Faculty members identified as having this power with students (profound influence even causing a re-orientation of a philosophy of life) are likely to be persons whose own value commitments are firm and openly expressed, and who are outgoing and warm in their personal relations with students.

The redirection of student values seems from this study to be most potent where an institution has a "distinctive climate" and where there is the individual personal magnetism of sensitive teachers with strong value-commitments of their own. In such cases, usually in the smaller, private colleges, "a community of values has been created" and a deep loyalty to the personality of the institution grows up and "a new value-orientation can mature and solidify."

These conclusions say to me that far from being hopeless, the problem is one of assuring the presence of *more teachers* who have strong value-commitments to which they are capable of giving effective expression. Surely one way to help bring this to pass is to have teachers more successfully educated in and habituated to *value-oriented instruction.* What this means and how it may be brought about, I propose to consider as my central thesis.

[1] Harper & Brothers, 1957.

What I am pleading for, in short, will be a kind of instruction at the college level which gives adequate stress to the *valuing aspect, view and orientation,* of *all* the subject matter and ideas being imparted, as an integral part of a comprehensive understanding by students of the subjects they are studying. Indeed to this understanding would be added the *will to act* because of valuing motives aroused by value-committed teachers.

If the habit of viewing ideas under the aegis of their connection with issues of choice, judgment, and interpretation on value grounds can become ingrained in students, surely a deep and wise valuing predisposition would be encouraged. And when that habit extends over and permeates all areas of intellectual and esthetic concern, a total cast of student mind is being cultivated which continuously relates constructive thought to important valuational judgments and activities. Appraising the human consequences of discrete ideas, which is part of what moral valuing means, will thus become second nature. And a valuing process which goes on anyway will be upgraded to a level of mature moral and spiritual insights. This is a major consequence of good education—namely to render habitual at a high level of discrimination and appraisal that awareness of all activity which places the finest value choices in the main stream of living because of their tested and satisfying character.

I offer my own definitions of terms. Even though they may not depart seriously from those of many others, my phrasing may more sharply direct attention to the emphasis I would like to achieve:

VALUE: A sentiment, prompting, idea, motive—so cherished and held to the fore in consciousness as to be influential in shaping the choices of one's prospective conduct or one's decisions toward rational judgments. A value is a conduct determiner and canalizer and thus may range in source from the promptings of the pangs of hunger to the desire to be well regarded in the eyes of God.

MORAL VALUE: The word, moral, would seem to identify those influences on conduct which have to do especially with issues and decisions that yield consequences affecting the welfare of others. Moral concerns have to do with striving to assure maximum use of people's creative and productive powers. Moral decisions are those looking to maximize these powers. If the consequences of one's conduct deliberately contribute to and strengthen the well-being of others, the conduct is moral; and moral values have been influential. In moral effort attention is being centered on the qualitative consequences of action on self and others. Moral values, relating as they do to how men shall live together in amity and affection, are illuminated by scientific knowledge of all the ways and means of associated human society, and the search for better humane consequences.

SPIRITUAL VALUE: Attributes and qualities which are imponderable, intangible, immeasurable yet identify needs, promptings and desires which in their abstract phrasing include such intrinsic ultimates as beauty, sacrificial love, willingness to submit to noble martyrdom, compassion, justice, a transcendent sense of mystic vision and union with the Other. Spiritual values point to the acceptance of an ultimate order, lawfulness, and meaning of the world as being of the nature of a human and divine spirit, beyond and ascendant over material phenomena. Spiritual values are embodied in the life of each individual self as he becomes a seeker after the finest imaginable aspirations of the intellect and the spirit. Relating as they do to the qualitative aspiration of the individual beyond itself toward infusing the process of living together with the overtones and aura of wonder, mystery, reverence, and glory, spiritual values are intrinsic to the human person. They need concrete embodiments so that in a literal sense "the word"—such as love or beauty—shall be objectified and dwell among us. These values imply no theology and their philosophic implications are suggestive, not systematic. But they do invite inquiring minds to theological and metaphysical elaboration—with a special attraction for those who would mistakenly claim that their own verbalized version of spirituality is the only possible one and their symbolic and ritual expression the absolutely true one. In contrast, I shall refer to moral and spiritual values in the naturalistic way just defined. The imputation is that the human situation requires that loyalty to these values has to be enlisted as the condition of the fulfillment of human selves and the survival of human societies. Of overbeliefs, both theological and metaphysical, we may all have our share, as well as our private constructs and commitments, but they are not the direct concern of this paper.

The cause of an education infused with positive sentiment, alerted toward a purified human good, stands as a cause of commanding importance. It is a cause which does not necessarily have to be continuously invested with theistic supports and sanctions to have persuasive power and appeal to wholesome people irrespective of their religious views. This naturalistic position, however, neither ignores nor slights the role of religion. Rather it runs parallel with it for part of the way; and it suggests that beyond a point ethical accountability for conduct, and the following of a particular religious authority or support, are matters for individual determination beyond and apart from the ministry of the school.

The cultivation of moral and spiritual values equates with an enlarged selfhood capable of feeling, thinking, and doing at a high level of excellence. The *emphasis* in this approach is what is

distinctive. For the intellectual aims—the forwarding of the life of reason—and the esthetic objectives—the deepening of noble feeling—these remain major college aims. The value stress and the moral and spiritual stress are really inevitable and intrinsic concomitants of already established educational purposes. But they are emphases that need to be freshly reinvoked.

How can we take several basic concepts which should emerge in various courses and be sure that the college student comes to live with them as viewed from the approach of moral and spiritual values? Clearly these values cannot hover over the campus in a cloudy haze; they are indigenous parts of dominant ideas and ideals if they are to have any reality and vitality. They seek embodiment in the thought and promptings of the passion→ principle→ performance, in which triple sequence much conduct can be helpfully understood.

Summary analyses of a few representative ideas which can illustratively convey the evaluative point of view will be presented—namely, science, democracy, leadership, administration, and self-actualization.

Science

Science supplies a patent instance where academic instruction is perhaps fraught with most confusion and with least regard for the value commitment. There are at least three ways in which the evaluative outlook could wisely be far more dominant in natural science instruction: (1) clarity about premises and postulates; (2) moralizing of applications of scientific knowledge; and (3) utilizing the logical steps toward truth seeking, problem solving, experiment, and invention which we conventionally designate as scientific methods.

I can only mention the intellectual and value dilemma posed by the discrepancy between the accepted premises of scientific inquiry—which are those of fairly rigid physical causality—and the more vitalistic, purposive, goal seeking, organismic premises utilized when human as against material concerns are being considered. Looking at the polarities—not to say the contradictions—of mechanistic as opposed to organismic explanations of physical phenomena, of human conduct, and of value seeking tendencies, does the valuing activity find any meaningful role? Are there or are there not influential determinants of conduct called moral and spiritual values? And if materialistic naturalism is the sufficient postulate, why all the excitement about values which have no influence? But if materialistic determinism is only a partial, a temporizing, a limited premise for purposes of analysis and prediction, what are we teaching in most colleges about the philosophy of science? And why do we wonder that science majors tend to have a myopia or a total blindness when issues of value are injected? Is man a physico-chemical, energy-releasing engine, or is he a value forming, value cherishing, and value realizing organism whose formative, purposive, directional, goal seeking tendencies are ascendant?

Our need is acutely for a philosophy of science which shows the place of philosophy and logic of organism along lines, for example, that the philosopher Whitehead has set forth. For if student and teacher are to hold the view that physical causality is the *only* way of explaining objective phenomena including the biological world, any concern about moral and spiritual values ceases. Newer philosophers of science are increasingly elucidating the fact that this problem is not philosophically unsolvable, but the nineteenth century answer proffered an inner contradiction and an unreasonable dichotomy.

Plenty of moral questions are sure to arise for students about the use of leisure time and the all absorbing counterclaims of material possessions and comforts. The uses of atomic energy and the reaching of agreement upon ways of removing all atomic discharges from wartime use present issues in all their human consequences which, horrendous as they may in prospect appear, have to be faced in the moral education of the young or their judgments about warfare will remain infantile, ineffectual, and perhaps even unwittingly suicidal. Indeed here, as well as in other connections, one has to evaluate the ethics of violence and of nonresistance, examine the sources of persuasion, and discover the meaning of peaceful coexistence and tolerance in relation to strong minded groups which cherish a differing life philosophy.

Then there is the desirable, possible resultant from science instruction of conscious mastery of precise habits of thought, so ingrained as to be capable of being readily applied in all sorts of nonscientific problem solving challenges and crises of magnitude both large and small, both international and purely personal. To say that this value does not now derive for all students from their science instruction is gross understatement. To far too many students, science study is a hateful and obscure nightmare and bugbear. The fault is one of both purpose and method of science instruction.

The basic difficulty is close preoccupation on the part of so many conventionally trained science teachers with the fact and subject matter emphasis. The scientific methodology tends to be taken for granted. The end results of scientific scholarship are stressed, not the intellectual processes by which they have been reached. There has been notable improvement in this whole situation in a few institutions, but in the overall picture science is being taught as an isolated subject matter stripped of interrelations with fruitful reflective methods.

It is hardly possible to exaggerate the betrayal and denial of any pursuit of value consequences and of humane significance in natural science study as we have been witnessing it in higher education in the last half century. It is, indeed, hard to grasp how so many well-meaning critics can inveigh about a general educational indifference to value orientation and not direct their guns more concentratedly against the materialistic implications of science instruction. And this not because the instruction is poorly done, but because it is done so superbly within the restricted and nonmoral premises that most science teachers use as the basis of their labors.

Let me state the whole natural science outlook quite differently in order to offer further evidence of the betrayal and the instructional indifference to the newer underlying philosophic premises of the natural sciences. The theories, postulates, hypotheses, principles—the so-called natural laws which strive to achieve truthful formulation and to give tentative but increasingly accurate accounting for all observable phenomena—all these are conquests of the human mind made possible by obedience to discovered natural law. In science we learn as we are obedient to all the hints and clues about nature's secrets which our insights can supply. Human values are served as rational, experimental conjectures have been tested. And the human consequences of scientific effort in technology on the one hand, and in medical mastery on the other, are at once the product of prodigious penetration and patience and of moral austerity of the noblest order.

How anyone can teach in the sciences—knowing the lives of the devoted science saints, knowing the benefits which they have bestowed upon a suffering humanity—and not be eager that the contagion of this high moral enterprise should be imparted to his own students is to me one of the many illustrations of academic obscurantism and failure of professorial imagination to see moral and spiritual values writ large across all their day-to-day, scientific subject matter. Interpreted in the newer philosophic orientation, it seems to me now possible to say that the sciences are progressively trying to give expression more and more accurately to natural laws that see the processes of nature in a coherent view as materially determined and valued, and *at the same time* in another and complementary view that see them as teleologically influenced and valued—that is, as affected in their actual process of operation by innately formative purposes and preestablished ends.

Democracy

The affirming of a democratic faith means the acceptance of moral values as controlling in each individual's choices, judgments and decisions in all their social, political, economic and religious ramifications. These include, as intrinsic democratic doctrine, the regarding of persons as ends in themselves, not the means to someone else's end; the unassailable self-respect and integrity of individuals along with their assured equal opportunities for maximum self-development; the free and affirmative consent of the governed on issues of public concern; the free expression of conduct, opinion, belief, public assembly and utterance, as long as these are not positively hurtful to other citizens. We are inescapably involved morally and spiritually as democratic citizens in an *aspiration*, an ongoing *process*, and the use of varied *methods* in order to accomplish improved human consequences for persons and for functional groups out of the public ordering of a democracy's common life.

For students in their formal education to be left unaware intellectually and unmoved emotionally by the nobility of the appeal of the democratic cause—this would itself be immoral. We should seek wider participation by students in democratic agencies of various kinds through which enthusiasm and skill for democratic action will be generated. Beginning in college student government, and going on into volunteer work for the party precinct captain and at the polls, and continuing into the willingness to accept suitable public office, the college student should not be allowed to ignore the moral values which his privileged education would properly motivate him to put to such uses.

More than that, in a world situation where two radically opposed ideologies seek to capture the minds and hearts of men in the so-called neutral nations of the world, for educated young people

and for teachers to have little or no awareness and commitment to a democratic faith becomes at bottom well-nigh treasonable. We have to come to see that we are not democrats because we happen to be Americans. We are democrats because this life orientation represents the *only way* humanity has yet discovered by which individuals are at once protected from the power encroachments of authoritarian personalities and selfishly organized groups; are given the necessary scope for their own freest self-growth and actualization; and are assured those forms of associated, shared action which will affirm a public interest. Democratic environmental conditions are the growth conditions with which those with psychological astuteness have to structure good educational results. A democratic environment is *the only one* which maximizes the chances for each individual to achieve his potential best in creativity, rationality, and love.

Leadership

As democracy is a nucleus of ideas and processes close to the foundations of our living, so *leadership* is a reality which when it is democratic identifies much that is worthy with which younger members of our society have to become familiar. The alleged cultural leveling down of democratic societies toward mediocrity is in actuality offset where creative educated leadership influences are at work in organizations of all sorts, including of course the elected officials of our political society. Ours is a society in which many become leaders in some one or another group, large or small, official or voluntary, while gladly remaining as followers in many other situations. And due to the always improving level of education in our democracy, both leaders and followers are collaborating to bring about great economic abundance and true cultural excellence.

The exercise of personal power over others to a pathological, authoritarian degree may occur in any society under the guise of leadership; and it is only as the intelligent practitioner of democracy is clear about the identifying hallmarks of democratic leadership, about the proper exercise and scrutiny of leadership power, about periodic public review of its consequences, that we are making use of the leadership idea to the best and most safe democratic advantage. And all of this can be educationally imparted. We know that leaders can be trained.

Thus it is that we can hold in rightful check the actions of selfish, aggressive individuals, and channel their excessive power ambitions into socially constructive outlets. Democratic leadership, in short, is heavily charged with moral obligation to lead away from power aggrandizement and to cherish the personalities of followers—whether in situations as citizens, employees, volunteers, or students. A good democratic leader, in a word, is known by the personalities he enriches.

Administration

These considerations lead on to mention of a related area and activity. The tasks of *administration,* management and supervision, are common to the most diverse organizations from the heirarchies of the public services through business corporations and including hospitals, colleges, prisons, and churches. The numbers involved either as those directing or as those directed in our American scene run into millions, and the whole fabric of these individual lives as well as of the lives of relatives is affected by the policy decisions and human relations practices of our multiform corporate life. It is because this is so that all administration becomes a moral arena and constantly is involved in decisions which are moral acts. This is, of course, the case because of the human consequences on numerous personalities which ensue from directive labors at every level of oversight.

Aspects of administration into which moral considerations inevitably inject themselves include the work of labor union negotiation, of internal communication, of the programming of joint collaborative plans, and the hour by hour adjustments of persons and groups which we are now calling "human relations."

The rights and the wrongs in all these areas and processes, the impact of shortsighted decisions, the human frustrations of workers due to inept or brusque directive oversight as aspects of these human relations—all of these issues are laden with moral-value meanings. Indeed if one confined one's gaze only to the administrative anguish and insensitivity in our educational systems, he would have reasons enough to understand why I include administration as a concept which education has to confront in moral terms and moralizing ways.

Administration and authority are coincident. And it is important educationally to clarify the sources of authority and the moralized ways of exercising it. From the moral standpoint, authority derives from the necessary exercise of a function which has to be performed, from ade-

quate related knowledge, from shared counsel, from rational judgment, and honest character. And the widespread necessity for decision-making requires that many more persons come to understand the rationale of exercising authority as not arbitrary in essence; and that they therefore come to exercise it at a higher level than that of wilful self-assertion and the manipulation of others.

Self-Actualization

I would as my last illustrative item make brief allusion to the possible uses of psychology as a basis for clarifying the personality or selfhood values which serve as a central and underlying standard or criterion in relation to which so many of our judgments of people and events have necessarily to be made.

The increasingly dominant note in the most advanced psychological scholarship has to do with emphasis on the *whole, wholesome, and healthy self*—its nature, its facets, and its potentialities. This is in contradistinction to those current psychologies in which attention is focused on partial or pathological symptoms, types, and characteristics. The elements of what is now being called *self-actualization* supply a composite view of qualities which are manifested in healthy selves and which can gain wider and greater growth as their components are consciously realized and educationally cultivated. The exposition of this whole outlook is to be found in the writings of Kurt Goldstein, A. H. Maslow, Gordon Allport, Erich Fromm, Jung, Ross L. Mooney, Carl R. Rogers, and others. In the volume entitled "The Self: Explorations in Personal Growth"[2] Clark E. Moustakas, editor, has brought together chapters by eighteen scholars which illuminate this self-actualizing view in a definitive, persuasive, and revealing way.

In closest relation to the present topic, the combined emphases upon creativity and productivity as dominant characteristics in self-actualizing, as well as upon a more freely and widely expressed affectional impulse and esthetic expectation—these are the important focal points. The underlying question here posed is as to the kind of environing conditions *including education itself*, which will heighten the likelihood of constant individual growth toward this fullest self-realization. In other words, the most profound psychological truths about wholesomeness and growth should tell us much about what we should value in human desires as conducing to moral insight and fulfillment in people.

Using creativity as an example, and using the artist as the best exemplar of free and satisfying creativity, we may note suggestively that for the artist there is self-choice of medium, self-insight as to vision, self-interpretation as to form and style, and self-acceptance as to outcome. And the value question posed is, how can more people in more vocations and in other activities find experiences that will conduce to a satisfying creativity embodying these good characteristics? The artist's experience as such is special, but in actuality *any* worthwhile body of unified activity can be the individual's channel for making a productive and unique contribution.

Hopefully creativity can more and more manifest itself in *work* activities, where the individual in return for his livelihood may make his central social contribution. Indeed this is a possible and desirable situation of the highest moral importance. For if we ask, as we well may, what *is* this moral conduct that is the outward evidence of inward concern for moral values, the basic answer may well be: *the most important moral value to espouse is the achieving of the greatest possible creativity in the work contribution that one necessarily makes to society.* One's job can be one of the most significant and rewarding mediums for expressing moral values, just as can family and neighborhood responsibilities. (And, of course, for the student his studies are his job.) We are most moral as we are most creative in ways at once loving, rational, lovely, and productively related to our work assignment. And our most likely occasion for fulfilling our moral purpose (with its good consequences for others) is in that economic role which is each individual's functional assignment. Creative economic functioning is good personal morality.

What this principle says to education is that the attention of each student needs fuller centering on those matters of feeling, thinking, and doing which bear on mobilizing his individual selfhood toward his unique creative contribution, vocational and otherwise. Properly interpreted, this truth in penetrating application in a curriculum would integrate the humane and the applied studies in an unprecedented and psychologically novel way. It would give humanistic focus to vocational study and it would give vocational significance to the value-celebrating studies as embodied in the humanities.

[2] Harper & Brothers, 1956.

I am not attempting to prove that the newer concepts of the healthy self as creative, loving, and beauty seeking say the last word about the inwardness of human nature. But they are surely uttering a helpful and heartening corrective word in terms of emphasis. For they are underscoring the vitality of certain wholesome human qualities expressive of the spiritual values already defined, and are showing their natural healthy origins and their vigorous moral vitality in the native goodness of human nature.

Conclusion

The purpose of all this—if it needs restatement—is to bring home the truth that there is vital need in college education to bring about a greater centrality of the valuing process. I repeat that I have not attempted to show how the humanities and the social studies would profit immeasurably by this same sharper focus within this value frame of reference. Indeed the humanities especially give opportunity for special stress on the spiritual values while the social studies can be fraught with moral value implications. I have been suggesting that the college student who has had four years in which in every direction and toward every subject studied to become value oriented and sensitized, would for himself and for those whom he might later teach have achieved a superlatively desirable new enthusiasm, fervor, and focus. Relevance of subject matter would be restored; inert ideas would give way to dynamic ideas; idealistic or Utopian appeals could find a grounding in the actualities of gradual growth and natural processes.

Objection to this whole presentation may be offered in terms of its being concerned with too "top level" issues, and with too refined, rationalized and ultraphilosophical aspects of value orientation. I plead guilty on this count. The emphasis has been deliberate in the conviction that value insights and commitments cannot be made in separation from the more ultimate philosophical issues to which educated adults have to address themselves. Both rational integrity for the individual and the facing of his responsibilities to society—these are what the confronting of moral and spiritual values *means*. And the young teacher who will have come through his college education imbued with this *moral bias* and spiritual responsibility can never be the same again as a person. To him as a teacher a new dimension will have been added.

Nor is it to be rightfully assumed that I am advocating only the verbal experience of college teacher talking and telling about value aspects. The activated and participative learning experiences do have to be adapted differently in different fields, and what may be required for a good learning experience in chemistry will obviously be different for a productive learning outcome in political science. I have already in numerous other writings set forth my views about such improved methods of learning in diverse subject matters.*

A final word is in order about the key importance in value learning of the contagious phosphorescence of the good teacher. No doubt great teachers will always be in short supply. But one identifiable superb quality deserves mention. Many of the most effective teachers at all levels have surely cared deeply about and for their students. The quality of caring does not necessarily imply a relationship of close personal friendship, but it does include a capacity to meet students on their own ground and to appeal to their striving in terms of their own idealisms and valuing efforts.

Let the college student be won by the personal dedication of a faculty group who are living exponents of value commitments and who can inculcate habits of discovering the human usefulness and guiding relevance of general ideas and values, and the splendid result will be pronounced and will be lifelong.

* I refer, for example, to my *College Teaching and College Learning*, Yale University Press, 1949; and *Character Building and Higher Education*, Macmillan, 1953.

Track

"Learned insisted that the college must define goals as clearly as the track coach and get the student's eye steadily fixed on them. In the hands of the college resides the obligation to see to it that before each runner there lies an ample, unobstructed course whereon, without waste of time or effort, his full powers can operate to express whatever of worth there may be within him."

Paul Douglass
Teaching for Self-Education
New York: Harper & Brothers, 1960.

Teaching, Learning, and Evaluation

A leader in the evaluation movement, the author of the following article speaks with authority. With degrees from Wittenberg (A.B.), Michigan State (A.M.), and Michigan (Ph.D.), he is director of institutional research at Michigan State. His recent books include "Evaluation in General Education" and "Evaluation in the Basic College at Michigan State."

By **PAUL L. DRESSEL**

EVALUATION is such an essential part of instruction and of learning that it is actually a point of view or state of mind on the part of the teacher. The good teacher is continually concerned about the effect on his students of what he is doing and continually seeks to find ways in which both he and the individual student can determine the extent to which he is really mastering and developing ability to use the ideas and skills developed in the course.

The underlying purpose of all instruction is learning. Good teaching, therefore, requires not only competence in one's discipline but also insight into the effect of one's instructional practices in promoting both the quantity and quality of student learning. Teachers can and do modify their teaching procedures, and many of those who have systematically done so have found that some teaching procedures are more effective than others. Only by systematic study of student learning—by evaluation—can the teacher know his effectiveness and make such judgments as promise to increase it. One need not argue whether teaching is an art or a science; both artists and scientists improve upon their work by study of their past performance.

Most teachers will accept the view that knowledge and understanding of facts and principles, though necessary, too, are less important than the development in the student of ability to make judgments of his own. Evaluation—the making of judgments—is not only necessary in instruction; it is, as a behavior desired in students, one of the goals of instruction. And students must be brought not only to making judgments but also making judgments about the adequacy of their judgments and even, on occasion, of their instructor's judgments. Thus the opportunity for the student to engage in self-evaluation with regard to the meaning and cumulative significance of his educational experiences and the provision of means whereby be may do so become an essential part of instruction. Such emphasis on self-evaluation not only provides experience for the student in making judgments but, by making evident to him his own shortcomings and the significance of these, it encourages the student to greater efforts in the achievement of standards which have become more evident to him by his own efforts at self-evaluation.

Properly conceived, evaluation is not separable from instruction and learning; it is an integral part of both. The meaning of this becomes more evident as we explore various aspects of organizing and teaching a course.

OBJECTIVES: EXPLICIT AND IMPLICIT

Teachers vary greatly in the extent to which they find it necessary to state their objectives. Stated or not, however, every teacher has one or more objectives, even if it be no more than the statement that the purpose of the first course is to prepare students to take the second one. In planning college programs and curricula, it has become customary to prepare some statement of objectives, although such explicit objectives are often ignored in the actual planning and teaching of courses. Sometimes this neglect results from objectives being at too general a level and sometimes from the fact that the objectives are written more to impress others than to provide guidance for teaching. Whenever the explicit objectives are ignored, it means that implicit objectives intrinsic to the actual teaching practices provide clearer and surer guides for instruction and student learning than do the written objectives. For example, the day-by-day progression through the chapters of a textbook has inherent in it objectives of memorization and recall of specifics which, though implicit, are far more suggestive of appropriate behavior than a stated but unimplemented objective that students should learn how to apply the principles learned in the course to problems not discussed in the class or in the textbook. Likewise, the teacher of Shakespeare who states that the purpose of the course is to understand more

about human nature from Shakespeare's depicting of characters, but who uses class time in requiring every student to repeat from memory 300 lines chosen from various parts of several plays implies to her students objectives quite different from the explicit one. This particular teacher gives a final examination which again requires rote repetition of these lines and further reinforces the student's impression of what the teacher really believes to be important.

Where explicit and implicit objectives do not coincide, the questions and examinations posed by the teacher provide the student with information as to what must be done in order to achieve a respectable grade. Inevitably students construe these to be what the teacher considers to be the really important things. On the other hand, if implicit and explicit objectives coincide, which is only to say that the day-by-day experiences of the class are obviously related to and dictated by the stated purposes, then the objectives provide definitive guides not only to the teacher but also to the students. Without such definitive guides, no meaningful evaluation can take place. An attempt to evaluate progress relative to objectives that students have not understood nor perceived as relevant to the experiences in the course can only lead to dissatisfaction for both teacher and student. If the difficulties of evaluating the really significant outcomes result in all evaluation taking place at a rote knowledge level, students will perceive the objectives at that level and little else will be achieved. Thus, the first step in evaluation is that of defining objectives in terms sufficiently concrete to provide direction in planning both instruction and evaluation.

The rational determination of objectives requires consideration of several factors. Objectives imply change, and change involves both amount and direction. Accordingly, some judgment is necessary as to initial strength and weaknesses of students. These must be viewed in relation to the demands of our present society and of our conceptions of the ideal citizen and society. Education has always been molded by these factors, but too commonly this has been at the subconscious rather than the conscious level. The liberal arts of today are by no means what they were 100 and 200 years ago, yet the change has never been a planned one, and many liberal arts college professors are apparently unaware that a change has taken place. Two factors have dominated our conscious consideration of objectives. One of these in the consensus of scholars as to what should be covered in a respectable course in a particular discipline. Textbooks represent the most tangible manifestations of this factor, although reports and recommendations of professional groups often provide guidelines. The second dominating factor has been the prevalent view as to the nature of learning. Languages, mathematics, and the classics, for example, were long defended on the basis of a now discredited though still widely accepted concept of mental discipline and transfer of training. There are now other and better documented views as to the nature of learning and of motivation to learning which can furnish some basis for deciding upon the appropriateness and feasibility of educational objectives.

Consideration of all these factors may easily lead to a profusion of objectives. American education has generally succumbed to the attempt to do too much and, as a result, many educational institutions do nothing really well. The teacher of a single course may err in the same manner. In fact, conscious selection of a few important objectives must be made, else the sheer multiplicity of goals will lead unconsciously to such a selection in that objectives implicit in practice will replace those explicit in statement. This choice is actually less restrictive than it may seem, for conscious attention to a few really significant educational goals will ultimately involve all other desirable ones, provided that the focus is on the meaning of these goals in human behavior. Discrete objectives viewed in relation to human behavior are just as arbitrary as the divisions among our disciplines viewed in relation to the actual demands in the utilization of knowledge. Nevertheless, a few major objectives make it possible to plan more coherently than when the attempt is made to keep many goals simultaneously in view.

Objectives and Educational Experiences

Objectives imply changes in behavior inclusive of such things as new knowledge, new insights into knowledge, new ways of thinking about things, as well as modifications of attitudes and values, of habits, and of physical activity. To bring about such changes, formal education provides a planned set of experiences. Several factors go to make up the nature of these experiences. The personality characteristics and the resources of the instructor and of the students are of major importance. The contents and the methods of the discipline covered by the course, textbooks, re-

source materials, films, and the like, are major elements in planning. There are also methods of instruction which grow in part out of the nature of the content, in part out of the personality of the instructor, and in part out of the objectives. Moreover, the educational experience provided by a course is not confined to the classroom. Indeed, the instructor who concentrates on student learning may consciously use the classroom only as a means of motivation for the student to engage in activities outside of the classroom, and to provide some basis for evaluating the adequacy and effectiveness of the activity with which the student is engaged. The selection of a textbook, the listing of resource materials, the use of the film, the selection of the methods of instruction, the planning of assignments for the students' outside activities—all of these demand careful and continuing examination in terms of the purposes which the course is expected to achieve. Lecturing by the instructor day after day in a freshman composition course or the use of group dynamics in the mathematics classroom illustrate obvious extremes of disjunction between method and purpose. Assignments of the common read-the-next-chapter variety, especially when followed by a lecture on the content of the chapter, provide the student neither any clear indication of purpose nor any meaningful activity in which to engage. Educational experiences, to really have their utmost impact, must be carefully chosen in terms of the avowed purposes, and these purposes imply student behaviors. The instructor then must continuously face up to the question of whether this method, these materials, this assignment will be more likely to invoke in more students the desired behavior than will some other methods, materials, or assignment. This initially is a matter of judgment, but the teacher can learn by experience provided that he continually evaluates the effectiveness of his plans by carefully noting what happens in his students as a result of them.

Organizing Educational Experiences

The really important outcomes of education are not attainable within a short period of time, certainly not within the confines of a single course. An individual does not learn to read or to write by taking a single course in reading or writing. In an earlier day, in the small liberal arts colleges, the creation of a unity of purpose throughout the four years was a relatively easy task, aided on one hand by the very limited and required curriculum, and on the other by the fact that the small professorial staff each taught a number of different courses and had continuing contact with the students from the freshman through the senior years. In contrast, in the college of the present day the faculty is a group of departmentalized specialists, and in the larger institutions each individual teaches only a limited number of courses, even within that department. Degree requirements may be satisfied by the accumulation of a wide variety of different courses and credit hours, with the net result that no one, least of all the student, has much idea how the various courses which he takes fit together, either at the time when he takes them or on an accumulative basis over the period of four years. In the concern that students be aware of a wide range of terminology, concepts, and principles for use in later courses in a department, the earlier courses may become a potpourri of material, such that even the day by day activity in a single class appears to the student only as a series of discrete, unrelated experiences. Even within a single course, the instructor needs to develop an organization whereby both he and the student can see that the ideas introduced in a course have continuing significance, and become more meaningful as they are elaborated and related to still other ideas later in the course. Where possible, the materials presented in a course should be related to previous courses. Some suggestion of their significance in later courses is also appropriate.

The ideas of a particular course can also assume greater significance to the student if a conscious attempt is made to relate them to similar ideas or contrasting ones presented in other courses. The student who satisfies the requirements of a course by learning what to him appear to be bits of information unrelated either to each other or to experiences in other courses or in the world at large is not likely to be very profoundly motivated nor is he likely to retain long what he has learned. Not only should the instructor consciously plan and organize the experiences in his course in order to achieve something of this cumulative integrative experience, but he should also attempt to evaluate the kinds of relationships perceived by students as they go through the course. This has a double value. The student realizes that he is expected to organize and relate his accumulating knowledge to previous knowledge. Also, the instructor has an opportunity to analyze and correct false associations and misunderstandings prior to the final examination which provides

such evidence but too late to do anything about it. Students' patterns of thinking are not always predictable. The insight gained by the instructor in the process can be used effectively in revising and replanning instruction.

Perhaps the most important role of the instructor lies in encouraging students to synthesize and organize ideas by presenting to the students questions and tasks which enforce review and reorganization of earlier materials in relation to those more recently presented. This experience is quite different from that of presenting the students with such an organization. In the latter case, the student's task becomes only that of understanding and memorizing that which has been presented to him by the textbook or instructor. In the former case, he, to at least some extent, has to exercise his own judgment.

The integrative task which the instructor sets for the student is at once a learning situation and an evaluative situation, for both the instructor and the student gain information on the extent to which the student has really mastered and is able to organize the ideas thus far developed in the course. The initial organization of a course involves complex judgments as to the best starting place and the sequence of activities from there on.

Outcomes

The decisions as to objectives, the selection of educational experiences, and the organization of these require many judgments. Some will be made in the light of experience. Some may require a great deal of evidence. In any case, the total course experience involving all of these factors is sufficiently complex that only an overall evaluation of the impact of the course upon the students can tell one whether it has been successful. In part, final examinations provide this but, unless paired off with a pretesting, they in no wise show change in students; they only measure status at the conclusion of the course. Furthermore, the usual final examination, prepared primarily for grading the student, is thereby so restricted in the kinds of tasks which are included that it must almost inevitably ignore many of the most important objectives. For example, most final examinations in laboratory sciences do not check up on the experimental procedures of individual students.

There is, of course, no reason why evaluation should be postponed until the end of the course. Much of evaluation, properly conceived, will be a matter of providing means whereby the student may know how well he does the various tasks assigned to him from day to day. There is, however, some point in making special provision at the end of a course for tasks of a more complex integrative nature than the earlier ones and for giving special consideration to the student who now performs at a high level, even though at earlier stages he may have had great difficulty. If the usual final examination does not provide adequate time, other projects may be devised. Even so, many of the most important educational objectives cannot be adequately evaluated at the end of any single course. Thus it is that comprehensive examinations, senior integrating seminars, and a variety of other devices have been introduced into American higher education not only to provide an additional integrating experience but also to provide for the collection of evidence as to how adequately the student is being led to organize the totality of his educational experience.

Instruction, viewed in its broadest context, is only partly a matter of bringing students in contact with an organized body of knowledge; it also requires assisting students in achieving some mastery of this field. Good teaching involves arousing interest on the part of students and motivating them to learn. Recalling that learning means a change in the individual, much of the problem of interest and motivation can be related to the need for making it clear to the student why some change in him is desirable. The student also needs some assistance and guidance in the learning process. A student who tackles a homework assignment of ten mathematics problems and becomes hung up on a small point in the first problem may soon become discouraged. If many students have the same experience, it is probably an indication that the preparatory instruction for the assignment was inadequate. As a result of such an informal evaluation the mathematics instructor often requires some work at the blackboard so that the students can be very readily observed and their minor errors straightened out before they become insurmountable barriers to further progress. The need is equally present in other fields, though the procedure is less obvious.

One of the strongest motivations to learning is found in the provision of satisfaction for the student through recognition and reward of his efforts. All too much of our grading and marking of papers emphasizes the errors and weaknesses of the students, even though we all know

that the natural human tendency is to engage in those activities from which satisfaction is derived and avoid unsatisfactory ones. Instruction requires making provision for the student to practice the behavior stated by our objectives. Each of his efforts deserves sufficient analysis that he can detect his strong points and weak points and move closer to some higher standard of achievement which becomes increasingly clear to him as he participates in evaluation of his own efforts.

The teacher may ask students to evaluate the course and his instruction. Two points should be kept in mind in collecting and using student evaluations. First, student reactions are but indirect evidence of effectiveness, though they may point up factors which impede effectiveness. Second, students should be asked to evaluate a course or a teacher in such a way as to keep in evidence that the students share responsibility with the teacher for the effectiveness of the course. Thus the student may be asked, among other things, to indicate what he sees as the major objectives of the course, what experiences he found most relevant to these objectives, how he studied for the course, and what changes in views or plans have resulted from the course. Thus the student is led to evaluate his own behavior, and from his report the instructor may infer something of the effectiveness of the course. There is no intent here to deny some worth for other types of student rating of instruction. There is a distinct implication, however, that an approach to evaluation which is at once a learning experience for teacher and student and which puts emphasis on the effect of instruction on student behavior has distinctive merit. It provides a final example of the thesis that evaluation is not separable from instruction and learning; it is an integral part of both.

Three Men

"In my own philosophy of education I have been influenced above all by three men:

- *The first was Jefferson, who was not only a superb statesman, but also a universal thinker. Jefferson felt that without reason democracy is imperiled. And Jefferson said, 'Do not look to the past; instead, look to the future. The past holds nothing for us but tyranny. The future promises the fulfillment of democracy.'*
- *The second thinker was Emerson. When I read Emerson's essays, like* THE AMERICAN SCHOLAR *. . . his essay on* SELF-RELIANCE, *I find indeed a man who lived education, who dramatized wisdom . . . Emerson had the idea that education must be a transcendental process, that it must appeal to our hearts as well as to our minds. And he believed that we need an intellectual declaration of independence to create a truly important culture in America.*
- *The third thinker was William James. Here was a teacher at Harvard who studied not only philosophy but psychology and physiology, who had infinite love for his students, who actually thought in the classroom, who was interested in the emotional development of his students, who felt that we must cultivate the will to believe, and that education, above all, is a motivational process."*

FREDERICK MAYER
Education for Creative Living
New York: Whittier Books, Inc. 1959.
Pages 10-11.

The Centrality of Evaluation

Perhaps the editor has said enough under "The Editor's Uneasy Chair" and on the editorial page. The relationships of evaluation are implicitly and explicitly recognized in the preceding articles. What the following article would point up is expressed in the title: the centrality of evaluation in the teaching-learning process.

By DELMER GOODE

THESE PARAGRAPHS on the centrality of evaluation in teaching-learning are offered, not as an authoritative statement, but in the interest of a more balanced theory and practice of evaluation. Defined as "the process of ascertaining or judging the value of something by careful appraisal,"[1] evaluation too commonly devotes itself to outcomes to the neglect of aims and procedures.

"Careful appraisal" of the teaching-learning process is a much more complex and difficult one than judging apples at a horticultural fair. The responses of students, with their built-in individual differences and their varied backgrounds, are so multiple and diverse that they baffle prediction and appraisal. But the teacher, in his own mind at least, must judge (or guess) in advance what should or can be achieved and must judge (or guess) as best he can when the results can be observed. Many kinds of tests serve to supplement his direct observation. In most cases, in fact, the student performances that the teacher "observes" are chiefly test papers. The possibilities of data gathering by means of tests are usually only partially exploited. Various techniques and expedients can aid the teacher in appraising. Sometimes several colleagues may grade or score students' work, their combined judgments, like the averaging of three readings, providing more objective scores. Effective appraising is no mere adjunct of teaching; it is an indispensable part of it.

Is not the ideal teacher one who knows what he is trying to do and why, knows he is using the right means to achieve his ends, and knows without pretense or self-deception that the ends he seeks are being achieved?

Our teaching, like any other intelligent activity, can be described as having three aspects: (1) what we seek to do, AIMS, (2) how we propose to do it, PROCEDURES, and (3) the results, OUTCOMES. As soon as we begin to discuss the three aspects, we perceive that in each of them a measure of evaluation is involved. An example of an aim (among scores of concrete aims that a teacher of written communication may set) is "agreement of subject and verb." Subaims may be "to recognize what agreement is" and "to develop the habit of correct use." One of these is factual knowledge, the other a habit. There are many categories of teaching aims.[2] How shall students be taught "agreement of subject and verb"? Shall we merely tell them, providing pertinent illustration? Shall we assign readings, written exercises? Many procedures are available.[3] Later we shall need to know whether and how well they have learned what was taught. This last is the evaluation of outcomes. How about the evaluation of the factors that have led to the outcomes, namely aims and procedures?

The very adoption of a teaching aim or of a teaching procedure involves evaluation. What is adopted receives *approval,* which is implicitly to say "This has value" even though no conscious choice has been made among alternatives.

If year after year we keep on under the same aims and procedures, we continue automatically to put our stamp of approval upon what we do. And if this is our level of operation, we are in a rut. We had better ask ourselves, Is all this good enough? Can't this be improved? Immediately we enter upon an evaluative thought process whether we go about it in a nontechnical or a technical manner.

Between nontechnical evaluation, which we engage in all the time as we make choices in our living and in our teaching, to do this in preference to that, to do a thing this way rather than that way, and technical evaluation, which is systematic, objective, and sometimes "scientific," there is no fixed division.

EVALUATION OF AIMS

The evaluation of teaching-learning aims has been extensively dealt with in curriculum studies. A curriculum study commonly determines a set of guiding principles which serve as a sort of score card for appraising various possible aims ("objectives" is a favorite term). By various processes and by various criteria, general aims and specific aims are set up. That is, they receive a stamp of approval.

Somewhat similarly, we may and doubtless should from time to time revise our teaching aims in each course we teach. We cannot do this without automatically evaluating because, as already mentioned, the very act of choosing or rejecting, or even of keeping, an aim is an act of evaluation. If we value objectivity, however, we will engage in various operations to check or supplement our subjective judgments. For example:

1 Performance of students in various sections may have shown strength or weakness in respect to some teaching aim, suggesting stronger or diminished emphasis or curtailment, expansion, or abandonment of the aim.
2 Each aim may be subjected to the question, Is it possible? It apparently is impossible to teach some persons to swim, at least without psychiatric aid. Similar blocks exist with reference to other teaching aims, and as expert teachers we should know about them and how to adjust our aims.
3 Related considerations are the adequacy of students' prior knowledge and the efficiency of prerequisite courses. If a prerequisite course has managed to skip something it should have taught, it may be necessary to add a new aim or set of aims before it is practicable to teach a certain scheduled topic. Or the students may be found, through a pretest or a later test, to be already versed in something we proposed to teach, and hence we can drop the topic.
4 The concept "desirability" is a further consideration in the evaluation of teaching aims. How to pick pockets would be a logical aim in a school for thieves but would be regarded generally as an aim undesirable both for the individual and for society. We need to have a philosophy of life and a theory of society, and we need to know the aims and policy of our college or university and of our department in order to determine the value of many teaching aims. In determining desirability of aims we also need to know the nature and needs of students.
5 Sometimes repeated experience may show that a particular aim, however time honored, never gets accomplished. Analysis may show that it gets crowded out, or no means for its achievement is available, or perhaps it is pursued in only a half-hearted way. Perhaps the aim should be dropped, or emphasis strengthened, or a new procedure found.

Evaluation of Procedures

Procedures are means and must be selected in terms of the aims to be served. If we set up our aims in sufficient clarity and detail, we are likely to want to amplify and vary our procedures. If we decide to lecture, we overtly place a value label on lecturing as the best procedure in the situation to achieve the aim sought. Later, when we appraise the outcomes, we may or may not consider lecturing to have been the best way. That is, if results are disappointing, it may occur to us that some other procedure might have been more fruitful, and so we "mark down" lecturing for the given situation and try to select some better procedure. In evaluating procedures we need criteria like the following:

1 Suitability: The first test of a teaching procedure, as of any other tool, is suitability. For eating soup a fork will not do; a teaspoon will, but a tablespoon is better. Just as we demand adequate text and reference books and laboratory equipment, so we seek for each teaching aim adequate procedures. In evaluating possible teaching procedures, we use our powers of analysis and judgment, aided by our own and others' experience and thinking. In some cases studies have been made on certain procedures, and these studies may aid our choice.
2 Simplicity: A procedure should be adequate without being needlessly elaborate. A trowel or spade rather than a tractor is used in cultivating a flower bed. A procedure needlessly complicated for a particular aim may becloud and confuse. This principle does not mean extreme parsimony, however. A colored handle on a trowel, while not making the trowel any better, may give pleasure to the user and may make him more efficient in using it. Most procedures are better for a little dressing—for example, relevant humor, illustration, pithy phraseology.
3 Student involvement: As the student learns only when he is activated, a procedure that keeps him relatively passive will rate low. A demonstration or report that he presents before the class may rate high. A discussion by the professor (lecture) that puts the student to sleep will rate low, while a lecture that stirs him or a discussion in which he finds a vital part will rate high.
4 Flexibility: Because students are all individual and uniquely different, the extent of involvement will depend on the flexibility of the procedures. Individualization in teaching may seem impracticable in mass teaching, yet paradoxically it may prove increasingly useful with expanding enrollments. If students through individualization in teaching do more for themselves, the per teacher output in per capita learning may be increased.
5 Variety: We may in time become tired of teaching always in the same way and so may choose, for variety's sake, to adopt a new procedure even though it may be no better than one we have been using. Its freshness at the moment gives it a value to determine our choice.

Evaluation of Outcomes

We read in Scripture that God "saw everything that he had made and behold, it was very good." The best we can hope for, when we view the outcomes of our teaching, is to find that some of them are good. Outcomes are results actually achieved, and hence the more ambitious our aims, the more clearly defined, the more fully set up, the less likely that we will be satisfied with the outcomes. The readily satisfied are those that expect little. The teaching process, moreover, may have enlarged our view of what could be possible

or desirable, and hence we wish we had tried to achieve more. We may find some outcomes that we did not intend, some of them good and some undesirable. One hundred percent correspondence between aims and outcomes is seldom if ever to be expected.

Many articles and books are devoted to the evaluation of outcomes and are usable not only directly in studying our outcomes but also for their implications for aims and procedures.

All kinds of quantitative and qualitative evaluation of outcomes are used and must be used if the results of teaching-learning are to be adequately appraised. They may all be reduced to one essential demand, namely student behavior. We not only need to stimulate and guide student behavior but to observe and evaluate it. We promote the situations that will cause students to learn; this is teaching. We also determine the situations in which students will show that they have learned; thus we can observe and appraise the outcomes.

Our teacher of written communication can observe student performance in English usage in a dozen or more situations: oral recitation and reporting, writing themes out of class, in class, criticising own themes, others' themes, general class discussion, buzz sessions, conference, casual conversation, informal exercises and tests, formal tests, testimony of other teachers regarding students' use of English.

Outcomes are evaluated by observation, by standardized tests, by tests of the teacher's own construction, and since tests are partial measurements only, by techniques devised to supplement tests. Some outcomes do not lend themselves readily to measurement by objective tests. Effort to devise tests for such cases should not cease. Many techniques can be devised by the college teacher. An impromptu test such as a paragraph answer to a question may reveal a surprisingly fruitful result.

Using the "Microscope"

Objectivity in evaluation should be sought diligently as a check upon and supplement to the large proportion of subjective judgment that must be used for many aspects of the teaching-learning process. Tests and other techniques have another importance also. They serve as microscopes do, to disclose more than we can perceive unaided. Microscopes and telescopes open up vast worlds of reality that astonish and challenge us. The world and the universe we know are the same old creation for the most part and yet very different from what the ancients knew. In a similar though more modest way the techniques of testing and other kinds of controlled observation reveal to us many things about teaching-learning that we otherwise would not know. And when we know these things we can no longer teach as we once may have done, not knowing. We are challenged to set up aims and procedures that correspond with reality.

When we face up to the place of evaluation in teaching-learning, the implications are disturbing. Traditionally, faculties of colleges and universities are a "company of masters"—masters not only in our specialties but in our teaching. Unless we engage in a great deal of analysis of our teaching endeavor, aided by all the objectivity practicable, are we not like doctors without microscopes, groping where we should be working with the clear vision of scholars?

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Individualization

"Learned started from the premise that for educational purposes students in any classification are unlike. From this proposition he derived two corollaries: namely (1) that each student requires an adequate inventory of his existing equipment before his further education can be suitably planned, and (2) that students, even of apparently similar attainment, should be treated with sufficient flexibility to insure for each the opportunity to satisfy the needs and manner of growth that are strictly personal to him."

Paul Douglass
Teaching for Self Education
New York: Harper & Brothers. 1960.

Learned's Proposal: Inventory Profile In Place of Grades

In these pages a year ago we presented a challenging article on William S. Learned as "America's most therapeutic educational radical." We shall be too long a time catching up with Learned. The same author has treated Learned in a new book "Teaching for Self-Education" that should be a chart for the future of college and university teaching. We are privileged to print here one of the ten chapters. The author (A.B., LL.D., Wesleyan University; Ph.D., Cincinnati; post doctoral study, Berlin) is a member of the Bar, State of Vermont, D. C., and U. S. Supreme Court, was President of American University 1941-52, and is now Director of the Center for Practical Politics at Rollins College. The portion of his new book here printed is by kind permission of Harper & Brothers.

By **PAUL DOUGLASS**

WILLIAM S. LEARNED came to believe that what he labeled the "package method" of academic advancement had served its purpose in American higher education. He looked hopefully upon the passing of the system of units and credits "which, useful as it had been in the early 1900s, is not good enough for American education today." (1)

Without exploring the moral implications of academic fraud created by competition for marks or the wholesale cheating engendered by the system, Learned rested his case for reform on the extensive evidence which the studies produced to show the appalling discrepancy between a student's demonstrable knowledge and his ability as recognized by grades given him by his instructors. Under the ritual of the mark, said Learned, "the sole question is whether by hook or crook one can pass the arbitrary dead line with a collection of tokens that are likewise arbitrary." (2)

The substitution of a numerical symbol for an assumed intellectual value became increasingly repugnant to him. He expressed his position in these words:

> Any attempt to measure individual achievement on the basis of time spent or teachers' term grades, as now given to students in large groups and insufficiently understood, is in great measure a futile and ironic practice; these hour and unit standards based on subjective estimates of unassimilated information, contain no assurance of important meaning, and should not be used to measure an educational product when anything better is available. (3)

Learned's indictment stemmed from the fact that a mechanical goal measured by an adding machine computation in the registrar's office

> depends on a mechanical apparatus for its achievement. Once set up, without clear educational objectives stated in educational terms, a fixed machine for producing supervised term credits, however they may be reckoned, tends to *exclude everything not organized within the courses offered.* (4)

To describe such an educational system Learned coined the phrase *"self-sufficient indifference of the teaching mechanism."* (5)

Learned's concern about the meaning of academic grades was a part of his whole questioning of segmentation and discontinuity of the individual's knowledge. Looked at from the point of view of the student as the alleged beneficiary, the educational process appeared to Learned as if we were attempting to erect a sixteen-story building with

> wholly different architects, contractors, and designs for the first six, the second six, and the last four floors. The workmen at the thirteenth story scarcely inquire whether the substructure has been of steel, bricks, or wooden posts, provided it has reached the regulation height; and as for continuity, any one of their standard patterns—a hall, a museum, a library—is cheerfully undertaken regardless of whether the lines rising from below imply a residence, an office building, or a cathedral. (6)

It was Learned's belief that education can rarely be genuine and also tidy in the administrator's sense. The practice of assuming the formal identity of achievement expressed in credits might provide "administrative peace of mind," but created "far-reaching" damage in a "professed equating of educational content by means of the standardized wrappings in which it is delivered." (7) He believed that a movement toward educational sanity would require a shift in the very center of institutional gravity. He made his indictment specific:

> To anyone who knows the facts, it is evident that, in spite of the friendly attitude of teachers and the helpless good wishes of deans, *our educational institutions are in-*

terested in pupils and students only where they happen to impinge upon the formal operations of the mechanism. We cannot tolerate administrative vagueness, suspense, or untidiness in our education. We must "know where we are" in good clean credits even though the pupils get nowhere in particular. In other words, *we are afraid frankly to place the student, always unique and highly variable, in the full focus of attention and to venture direct dealings with the elusive, but recognizable and supremely desirable thing that we know true education to be.* We set enormous store by curricula and instruction, as though these were the essential matters, instead of bending every effort, first of all, toward finding out what unique combination of forces each individual before us actually presents, what he is, what he knows, what he wants to do, what he can do, what he probably should do; then helping him to do his own learning under conditions that keep him in constant contact with the realities of his progress. (8)

In the organic discontinuity of the process of American higher education Learned found "the mark" playing an officially deceptive role. It satisfies the administrative desire to have student affairs in order. It discharges the teacher from further responsibility for the student. It provides the student with a calendar for time-serving purposes and provides a schedule to indicate whether he is moving according to the timetable to get out of college with a diploma and a degree. It moves the student socially up the class rank from freshman to senior. *A student as a registrar's statistic becomes a convenient homogeneous administrative analogue.*

Although Learned recognized that a thorough reconstruction of the college would have to take its point of departure from premises fundamentally different from the prevailing ones, he was aware of the wholesale implications of his suggestions. What, for example, becomes of the college class defined as those who happen to enter at the same date "if each person is to be faithfully explored and developed for the unique quantity, value, and force of his ideas?" (9) Is perhaps such encouraged emphasis as "class solidarity" not mischievous? Has perhaps the value of class spirit not been imparted to the campus to fill a vacuum created by the absence of a community of intellectual interests? Or again, "what, in turn, becomes of the smaller class—or section—unit that now marches in chain-gang formation from the beginning to the end of a term, dragging with it many who derive little or no profit from its operations, because they are either too far behind or too far ahead." Obviously, said Learned, such a conception of instruction dies with the outworn device that has ruined, and will always ruin, group instruction, namely the *term credit.* With no credits to be earned or lost at the end, there is no virtue in keeping an advanced student within a particular group, or in urging that one who is unprepared shall stick in hopes that a lenient teacher will eke out the needed points. (10)

Learned pointed out that far from critically appraising the student, marks are given for a multitude of partly intellectual jobs, each with its frame of special conditions fixed by the teacher. In the process of checking the execution of these items, from course to course, the student, as a growing entity known to any intelligent observer, disappears. What happens is clear. Take two familiar types of youth. Case one is a student who starts brilliantly and lapses into indifference. Case two is a student who for lack of money or adequate preparation begins far down but gains steadily and comes to the top in scholarship and character. Average the marks of each for the quadrennium, and the mid-point is identical. Although obviously both marks are theoretical abstracts, they are in a form which the college accepts and promptly turns over to honor societies for their guidance. Nevertheless each tells a glaring untruth about its subject on the critical issue of his education.

Learned was convinced that one gets near the realities of personal education when one centers attention directly on the student, using the curriculum merely as a whetstone on which to perfect his edge. Accept each student as unique, Learned pleaded. Proceed to explore him, At the outset and from time to time turn his mind inside out to see what is really there. Use the data so developed to guide teaching efforts as well as to heighten the student's sense of security in what he knows and his respect both for its possession and for its increase. Lift student appraisal and decisions dealing with the core of education from easy formulas, bred of the adding machine, to the more difficult level of conclusions befitting the subject. Remember that, in spite of illusions to the contrary, the only outcome of schooling that persists beyond graduation lies not in what high or low "marks" make the student appear to have done to the curriculum; "it lies in what his studies, his teachers, the whole sum of his activities, in reality did to him. When the alumnus searches his heart, it is on this point that the college is finally judged." (11)

To Learned, reaching back into his German experience and deep into the Carnegie statistical records, the chief evil in the American college examination seemed to be the immediacy with reference to what it tests. It provides an incentive

to remember a lot of facts as they looked in the textbook—until the semester or course examination gives official permission to forget them. With characteristic vividness Learned put his point like this:

A fresh supply of raw facts heaped up by a cramming process for official inspection and credit on the books, tells us little or nothing. What we need to know is how much of that mass will be digested. We naively assume that the impressive contents of some thirty-two high school courses and forty odd college courses measure the education of the student who traverses them; at no point do we seek to find out what these injections have actually become in terms of durable educational tissue. It is this ultimate product that should have chief attention. (12)

Learned thought it essential that the idea of testing should be kept so far from any particular educational exercise that the pupil is not misled by it. Why? because

his business is to understand the matter in hand; to follow its implications to the limit of his interest. His appreciation and response should be engrossed with the intrinsic merits of the ideas before him. Therein lies his permanent education as distinguished from superficial reactions intended to justify "credits." If this cannot be done; if he can only be moved by fearing some nameless fate that lurks in "flunking," then he is probably working with the wrong stuff. The last thing that should occur to him is that the matter presented must be remembered until examination. This is no purist's criticism of his motive; it is simply to recognize the fact that knowledge held in place by such considerations does not last. It is, in general, not worth measuring. (13)

He wanted no examination-dominated curriculum in the sense of registering semester by semester what has been laid out in advance. He said:

We need to exorcise the haunting fear of an impending test that is geared to a multitude of items which as yet have little perspective or significance to the student and over which he worries lest one escape. . . . Sealing a course with a test and a credit is like putting a candle that has just been lighted in a dark room; one hastily notes down what one has only vaguely seen and hardly understood. A "course" should involve no immediate, conclusive tests; it should simply open wide a door to light up a strange apartment. . . . Above all, no test should be used, as now, to put a fateful period to a pupil's first confused impressions. Tests on new stuff may, of course, be given, but only as an aid, a standing invitation to return later when knowledge has matured, and, when the test may reveal the pupil's athomeness within areas often revisited. (14)

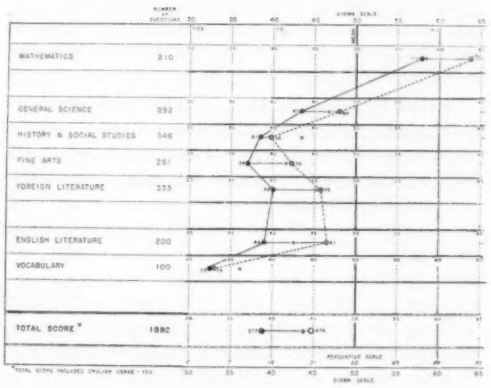
What kind of tests and examinations then did Learned have in mind? He described his concept explicitly! He wanted a test

which by its very structure informs the student and keeps him aware of the whole subject with which it deals—its elements, its central relationships, its more typical implications, its fastest growing developments. Books and courses turn on lights. The important thing is the actual thinking the student does for himself about what he sees. This the tests should measure and should have no necessary relation to any courses. It is appropriate, therefore, to hold tests periodically available to the student over the whole range of knowledge regardless of his school program. The purpose of the teacher and the college is to arouse and intensify the student's thinking in as many fields as his personal energy and ability find profitable. (15)

To Learned it was essential that the comprehensive inventories which he championed should not have an immediate connection with any particular item on any particular day in such a way as to defeat a student's intent to understand a matter for its own sake. His record examinations were to require and reward a true intellectual poise rather than a feverish obsession with "marks." It would be a test not only of matured knowledge but also of the motivation that produces it. Learned believed that when the tests of a student's success no longer rest with teachers' marks but measure with approximate accuracy the amount of profitable thinking done, ideas mastered, working knowledge retained, the chief duty of the college will become unmistakable. And what would be that indicated task?

To exhaust every resource in finding for each student that magic area in which "profitable thinking" can and will be done, ideas be mastered, and working knowledge retained. For some, the materials must be simplified, for others greatly advanced, but when the test is applied and gains or losses revealed, one fact must infallibly appear:

PROGRESS PROFILE OF A STUDENT



This is a portion of one of Learned's graphs showing the progress of a student who as a senior stood at about C minus if reckoned by course marks.

the school must ensure that what is measured is the pupil's permanent capital, with power behind it and a use to make of it. (16)

With his optimistic faith in the positive response of students to education redeemed from the ritual of the mark, now solidly strengthened by his research data developed in the Pennsylvania study, Learned asserted the proposition that the student will be the first to seek and endorse the intellectual inventory, successor to the alien requirement of the mark. The inventory profile, he asserted, becomes

> as inevitable and significant as the mark that registers his high jump or the time that measures his 100 yards. (17)

Learned looked to the refinement of the tools for measurement as an avenue for education to escape from the pseudo-standards that hamper and mislead higher education. Increasing knowledge of measurement, he was convinced, would one day encourage the college to be sound and bold enough to shift its emphasis from formal instruction on which a student is minutely judged and credited, to a searching analysis of the student and to his aid in acquiring an education founded on demonstrable resources. Then, he felt, the simple, necessary, and drastic revolution would ensue; education would restore *the sense of achievement in its own terms—namely, the mastery of important knowledge.* He said:

> Let us have done with credits, points, semester hours, units, and the like, and let us act on our conviction that education consists in awareness of the insights that result from essential interlocking ideas thoroughly understood. *We shall thereby have touched off the charge that must clear the way for all the rest.* (18)

From his intimate Pennsylvania experience in the largest educational measurement study undertaken to his time—"a project embarked upon with the greatest misgivings and because it appeared to afford the best chance of a helpful solution" to education's gravest problems—Learned stated as his informed conclusion that more can be done "for the sanitation" of the educational processes through objective educational measurement, intelligently developed and applied than in any other way. (19) Speaking with authority as a responsible Carnegie staff officer as well as a pioneer in a new educational territory, he declared that "we already know that *the travesty of college scholarship that is permitted today is wholly needless. If it is retained it is simply because we intend to retain a travesty.*" (20)

As his considered conclusion Learned asserted that the ritual of the mark injects an alien requirement into the educational process that is destructive of intellectual morale. He put his idea like this:

> The basis of *intellectual morale* is to be found solely in the grip that sequences of important, educative ideas have on the mind. *The prerequisites for its development are time, freedom, and encouragement to continuous thought*—all elements that are conspicuously lacking in colleges as at present organized. (21)

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The Spring Issue

Ten articles will pack the Spring issue written by George Beecher (Goddard College), James O. Buswell III (Wheaton College), Robert L. Coard (University of Alabama), Walter J. De Mordaunt (New Mexico State University), Joseph Justman (Brooklyn College), Frederick Mayer and Joseph R. Royce (University of Redlands), Lieutenant Colonel John R. Sala (United States Air Force Academy), Daniel A. Seager (Colorado State College), Chester A. Williams (University of Oklahoma). Editorial: "Doctor of Philosophy."

The Flotation Technique: Teaching Without Grades

An adventurous professor who has pioneered a way of teaching without grades ought to be worthy of attention. Those readers who know "Two Sides to a Teacher's Desk" or the articles which Dr. Marshall has contributed to this journal will read with ready interest his lively account. He is professor of microbiology at the Medical Center of the University of California. The article is taken from a somewhat longer one entitled "This Thing Called Evaluation" published two years ago in The Educational Forum (copyright 1958 by Kappa Delta Pi) and reprinted by kind permission of the Editor.

By **MAX S. MARSHALL**

UNLIKE MOST MODERN INVESTIGATIONS, this one did not begin with a large grant of money. It was only an unorthodox part of the day's teaching, demanding only a change in method and viewpoint. This should commend it to the attention of administrators. We who teach all know the importance of the interest and approval of our beloved administrators, so I rush to say that what I discuss here involves no expensive program, and that, though the subject is controversial, it will be so regardless. Students have been in favor of the experiment all the way, but something may have to be done with some of my fellow teachers. However, not only are all of them accustomed to the collegiate version of the slings and arrows of outrageous fortune, but they will argue about something anyway. Professors have been aptly characterized as persons who instinctively take the other side on all issues. But let us get on with an objective description of the experiment. I use the word "objective" loosely, as though it had reality, which of course it does not.

In 1930 we had a class of medical students for a course of eight credits or units of microbiology. The class that year had been subjected to a common ritual. Each student was continuously appraised by instructors who then used their preferred symbols to express approval or disapproval. For example, a notebook which looked much like all others, we hoped by accident, led to a grade of "C" entered opposite the student's name under "notebooks." If only three out of four expected points appeared on answers to questions in an examination, the teachers registered a limited approval by recording 75 percent. A student who, in an oral discussion, had the answer expected by the teacher might get an "A" or a "10."

During the term we gathered some 35 recorded scores or symbols. Although the set of 35 would have made a partially complete description, they had to be consolidated into a single grade or expression of approval or disapproval. Registrars are boxed in between the administrative and teaching bodies, forcing them outwardly to be docile persons, but 35 grades for each student and course was too much for them. The arithmetic process of reducing our 35 symbols to a sort of average was a painful affair, requiring about a week. Even so, the frequency with which someone would discover that we had converted a combination of 67, C, and a plus-plus to an impossible "B" was embarrassing. Arguments over the results, accurate or not, were common. This was when I learned to consult the women teachers when the work of a good-looking coed was under debate. The coeds had learned long since that most male instructors viewed their work more charitably when they used their eyelashes than when they used their brains.

One man, in the class under discussion, irritated some instructors and appealed to others. With training in engineering, he was more mature than his classmates, and he was president of his class. These presidents are often students whose scholastic talents are not noteworthy either way but who have diplomatic talents varying from superb, meaning normally balanced, to magnificent, meaning that they are smooth political crooks. Presidents of well organized classes such as occur in professional groups usually have to be treated like administrators; that is, with care. This particular gentleman came up with a "D" by arithmetic average and for once no one could find an error. His work for us seemed notably more effective than the "D" implied so the in-

structors decided that the "D" was not proper. This case of pronounced apparent discrepancy set us off on our experiment.

During the first couple of experimental years we dropped everything but the subject itself, and some of our neighbors seemed to think that we had dropped that. We threw out everything that had to do with grades. We omitted examinations, called in no notebooks, and kept only check lists of work performed. We operated on the ridiculous assumption that the students were there to learn and that we were there to teach. With no precedent, older classmates could not indoctrinate our experimental class. With organized classes, this form of indoctrination can be insidious; you are beaten before you start in matters which you seek to improve. Our first experimental class accepted the changes in excellent spirit and went to work.

The results astonished us. For example, students were told that a notebook in our laboratory was unusually useful because many tests were carried on simultaneously over periods of several days; but we made it clear that we would call in no notebooks. We used notebooks at desks, with the students, and showed interest in them. We saw really meaningful notebooks for the first time in years. We soon learned that students who had stayed away from instructors, afraid of currying favor or creating poor impressions, relaxed and acted naturally with no special awards or nagging penalties. Tension over black marks will never be eliminated but it was reduced as if by magic. Students surprised both themselves and us by asking for examinations, because it was too easy to postpone study and go to the movies. The instructors also relaxed, with removal of the constant unpleasant demand for judgment and appraisal. They were suddenly freed to concentrate on the student and on the subject. Good students breathed audible sighs of relief, for the first time, many of them said, free to study on the subject matter for its own sake instead of concentrating on a sociological problem in human relationships. Weak students, unexpectedly treated like the rest of the class and spoken to in a friendly fashion, took on new courage. The low and high grades and the atmosphere of eternal haughty judgment, those barriers between teacher and student, were down. The term was one of real discovery, and most of the discoveries were pleasant.

The evidence was clear to us. A class of medical students had applied itself to study, aided by interested instructors. However, we had nothing with which to satisfy our dean and recorder. We could give a student an "A," but, if instead we said that we liked a student's work, we were charged with improper conduct. There was no place on the card for remarks. Good salesmen as well as good students get "A" and ornery fellows who upset the teachers as well as poor students get "D" but the distinctions are not mentionable. The rules of evidence and the rules of justice are tricky. That an "A" signifies liking is a fact, and liking depends on many factors. Some instructors are sure to approve of students said by others to be poor and *vice versa*, leading to trouble if instructors express themselves openly. However, they can hide behind grades. I once put this problem to an ardent supporter of grades, which, significantly enough, he had used as stepping stones. I mentioned one or two men of equal rank whose judgments of students differed from his. With no humor whatever, he proclaimed that some men, clearly those who disagreed with his judgments, did not use the system properly.

How to meet the demand for a record was an immediate question. Deans and registrars are likely to be fond of rules, so we had to choose from the accepted symbols, A, B, C, D, E, or F. Our agreement with the experimental class hinged on this point. Since our students then needed an average record of "C" to keep out of trouble, no one would be hurt if all students were given grades of "C." Chairmen of all departments concerned with our students had agreed to use "C" grades when I pointed out what was happening. Many students were falling below "C" averages in our term and they were putting teachers of the next term under violent pressures. They had to use abnormally high grades merely to pass students. We had told our experimental students that they had nothing to gain but an education from us and nothing to lose except their medical lives, but this only in severe instances. There would be no canceling of one grade with another, and no nagging grades of the kind which says "we don't like your looks and don't want to see you again, so you get a 'D'." Work for applause, for artificial awards, or coasting on a fair record would seriously endanger their medical careers. The moral effect of this proposal to offer no high grades and to protect them from low but passing grades was sound and the educational effect was good.

Since I am reporting what happened, I must

here interpolate an aside. At the end of our experimental term the chairmen of other departments, who had not altered their teaching and had all but forgotten the agreement to use a single passing grade, without a blush reverted to standard grades. The major offender was a department which had a course of eight units, as we did. Most of their grades were usually "C's," but they were fond of "D" grades and took pleasure in praising one or two favorites by giving higher grades. This treachery, after a sworn promise to the students, left me in the position of the chemist whose final concentrate crashes on the floor. In a mood to make a few blistering remarks, I managed to find the names of all students who were given "D" in this other department. Every one of these was cancelled with a "B" in our course! Before you question the ethics of this move, please also question the ethics of the fellow who broke his agreement. Eight or ten students whose low grades were neutralized, several of whom would have faced trouble at the end of the year, with perhaps one or two dismissals, were saved considerable anguish. Each of these students graduated without further troubles, putting the other department in a poor position as to their judgment.

Many points of detail of our experience must be passed by. For instance, we had to develop some sort of records and also we put back examinations for both psychologic and educational reasons. By the second year the earlier class was telling the lower class how we did things, although it did help us with its approval. However, after each reappraisal of the situation we found that most of the principles could well be retained. Experience gradually began to reveal its lessons. The results seemed so surprising that I naively thought that the benefits should be made public so that others could partake and so that we would not be isolated with a unique method. Our experimental observations became the subject of debate in committee meetings of the faculty, but the idea appeared radical to many of those who had no experience with the procedure.

With the war, students were assigned rather than selected, graded appraisal seemed fatuous even to those who liked such things. Two schools, medical and dental, outwardly dropped the A-F system of grades. One school used two categories, "passed" and "not passed," quickly returning to grades without even knowing it by adding "high passed" and "low passed." The other school, objecting to the rigorousness of "not passed," used the terms "clear" and "not clear" to label its two categories of students. This school really used only the two categories but most departments, keeping their own records, continued to use the old grades. Although they were within their rights in using whatever words or symbols they chose to record their observations, they lost the entire spirit of the shift. Even so, the absence of any deliberate scale of grades for nearly a decade was interesting and profitable.

To a dyed-in-the-wool grader, the thought that grades are disturbing can come as a surprise. That grades become badges of autocratic or despotic judgments of students has not bothered them. That grades introduce a serious pedagogic fault, with a marked and often adverse influence on teaching itself, does not occur to them.

A friend of mine who taught dental students favored the use of grades but was willing to weigh the question. He once lined up some large models of teeth and asked me to look at them. He pointed out the smooth contours, perfect fits, and strength of fillings in the teeth at the beginning of the row and then described carefully the progressive irregularities in teeth farther down the row. Having told me about the differences, he pointed out that I could see them clearly, though I was not a dentist. Then he asked triumphantly, "Why shouldn't I grade them from A to F?" My answer startled him. I merely said, "You just told me why you should not." He looked puzzled for a moment and then began to smile. He had been telling me specific features that he thought were right or needed correction. Not his judgment of rank but his specific observations were pertinent, whether he was teaching or just talking to me. Imagine that you are a prospective employer, and I know a student better than you do. You ask, not for my verdict, but for what I have observed, that you may judge for yourself. If I say, "I gave your applicant a '76' " and walk off, you have no observations but a perfunctory statement of my conclusions. Perhaps you are learning to drive, to paint, or to play the piano. You look to your mentors for guidance, not for their judgments. You learn to do these things because your primary interest and responsibility is with your own life and future, not just with outranking someone. If an instructor gives you a "C" every time you move, meaning commonness or mediocrity to almost everyone, you are not only not helped but you are discouraged, perhaps disgusted. Students submit to this disturbing process of labeling for

years. That they survive is a tribute to their stamina, not to the teaching.

SUPPOSE THAT, instead of a grade, words are used, perhaps a comment like this: "Slow on the uptake, earnest, reasonably industrious." This could be equivalent to a "C," but that student is entitled to his place in the world. He goes to school not to get a teacher's judgment but because the teacher has more experience than he has. In some situations his talents and efforts may have to be discussed, but this is a sort of indecent gossip and should be restricted whenever possible. To describe his work is bad enough. To use a mere symbol, a "C," is an unhelpful imposition. The student asks what to do with his sick horse and is told that his horse is sick. A healthy attitude calls for concern with the student's talents and efforts and what to do with them. A teacher can be friendly with and can respect any honest student. A barrier is erected between the two when the teacher merely bestows the highhanded "C" of mediocrity. Try thinking in terms of realities instead of grades sometime. This does not imply that students are equal in ability nor does it imply that critical judgments of students are not needed at times. Nevertheless, you will find that the process of foregoing all thoughts about classifying a student as good, indifferent, or bad produces a healthy change in outlook. A new interest is acquired in helping students to help themselves, the only substantial teaching.

The urge to grade, we discovered, came from several groups of teachers. Punitive teachers, for example, seek a simple and seemingly impersonal way to threaten, to slap the wrists of students. Political teachers feel frustrated when they cannot pat their favorites on their backs with seemingly impersonal praise. Maudlin teachers use grades instead of handkerchiefs for their tears of sympathy and lovers of authority take real pleasure from the final mandates of approbation or disapprobation. Nor can we forget the chart-lovers to whom the realities of life are less than their neatly ruled charts of purported data. Members of all these groups feel frustrated without grades, yet none of the five is supported by a worthy educational motive.

Some of our best experimental progress was made during the era when no department was required to report any grades. When grades were required we used only two, one to say "promoted" to most or all students and the other to express doubts, if any. Usually we used a "B" and some one grade below that, "C," "D," or "E." Often all students got "B" grades. The use of any combination of two grades was awkward but since the lower grade was always scarce, arguments were few. Most students either felt that the grade of "B" was acceptable or considered it to carry a bonus.

GETTING RIGHT DOWN TO BUSINESS, we are now considering two specific problems: first, to find a method which can be used for such appraisal, evaluation, and recording the performances of students as may be essential, and, second, to weigh the relation of this method to teaching itself. Known in some quarters as "evaluation of student performance," we can save trouble by avoiding stuffy complexities. The real problem is direct.

On occasion we who teach have to certify that our students work or do not work and that they either possess or lack talent so that their work is effective. Their performances are and will be the resultants of forces of capacity and energy under rules which work here as in physics. When a student of given capacity applies himself to the subject of study with a certain energy, some expression of the ratio of Capacity to Energy should make a satisfactory record. The student high in capacity but low in work and the student low in talent but strong in energy are both deficient, so that the actual ratio of capacity to energy is undesirable both when it exceeds 1.0 and when it is less than 1.0. Equal capacity and energy are not the goal, for both the fellow low in talent but working at a low energy and the brilliant fellow who works hard may attain unity so that they appear equal, yet they represent opposite extremes of desirability. Most students are between these extremes, and here we do not all agree. Some of us favor the fellow who is brilliant but works at half speed over the ordinary fellow who works at full speed and *vice versa*. We cannot say one is good, the other bad. Reduced to the basic elements of capacity and energy, attempts to measure and record each quantitatively would take us back to the ranking of students on an empirical scale. This, in fact, epitomizes the scrambled efforts to describe a man by a single symbol, the grade.

That the principle of a relative grade or scale itself is in error does not make it easy to avoid without subterfuge. The instructor who first reads an examination with the intention of eliminating grades will find himself writing "good" or "bad"

on papers, mere equivalents to grades. When an answer makes a good impression, not the impression but the reason for it is significant. The specific reason, not the impression, belongs in the record. Some teachers catch this point quickly. Others require a year or two to break away from the scale of relativity. The essential feature of appraisal and record is not one of rating or grading, nor does the simplified sorting into only two groups, "passed" and "not passed," meet the situation, for the category of "not passed" is not a record but a conclusion. To divide a class into two groups called "clear" and "not clear" is a satisfactory move, but it leaves to someone the task of finding and weighing specific difficulties of students who fall into the "not clear" group when the record says no more than that.

Viewed as classifiable objects, only two groups of students seem proper. The first and major group, often an entire class, consists of students who are in the clear. Its members do at least a moderate amount of work and have at least acceptable talents. They are promoted and wear the cap and gown at Commencement. For the sake of mathematical elegance, let us call this group *P*. The second group is much smaller, for it includes students whose status for any reason is in serious doubt. The significant feature of this group is not the doubt but a specific recognition of what is wrong and a decision as to what should be done about it. Because of illness Jones failed to complete his work and missed the final examination. Smith is attentive and able but does poorly because he spends too much time in outside work. Johnson's girl friend takes too much time. Jackson lost a parent and became embroiled in family matters. Lee is cocky and smart but never gets down to work, Porter spends his energy on campus politics, and, earnest as he is, Campbell is just too slow to keep up. This doubtful group is a motley group with no two alike, but it is by far the smaller group. This group can be called the *Q* group.

The two basic groups are easy to remember. The use of *P* and *Q* to designate them has a certain mathematical elegance and gets away from the dangerous association with orthodox sorting into grades. As an aid to memory, the letter *P* happens to fit in with *P*romoted or *P*assed, the major group that is in the clear to go ahead, and *Q* happens to fit the *Q*uestioned group, students whose work is for any reason questioned, whether this leads to aid or censure.

Setting aside traditional viewpoints for the moment, our problem can now be put in plain English. We are matching all schemes which are based on *grading* or ranking against the use of pertinent *descriptive* words. In a sense, we ask whether the conclusion or the basis for a conclusion is a proper part of a record.

At first the idea is not easy to catch. *Grading* is a process of sorting, whether we say A to F, use the word "good," "bad," and "indifferent," or begin gloriously with "colossal" and work up, as they do with olives. The concept of *evaluation* straddles the fence most unfortunately. Let us drop it, preferably hard enough to break it. The imposing array of charts which are set up for evaluation by some educational groups are not worth the cheapest abacus in Chinatown. A *descriptive record* describes, without judging or grading. My description of the work of two students on the campus, given as you would describe an experiment in the laboratory, gives you some idea of what I think they are like. You may question my judgment, suspect bias, or believe me to be completely rattlebrained, but even so my description leaves you free to weigh my bias as you wish. What I thought I saw is not anonymous nor is it disguised by an illusory code.

Once again the English language has come to our rescue. Merriam-Webster's unabridged dictionary is said to define some 600,000 words. Surely this is enough to express our meanings. To be told that we must select one of six letters of the alphabet, without even one word, to describe a complex situation which is vital to the lives of our fellow men borders on the ridiculous. The suggestion that 30 students, or perhaps 300, be described by a reasonable number of adjectives after limited observations is at first overwhelming. One answer to this is that conclusions drawn on 300 students as though they had been described, in terms of a grade for each, seems worse than seeking the meager basis for conclusions, but let me hasten a bit further in a practical way. Our experiment revealed sharply and quickly that the most realistic descriptions were found by what I call a "flotation technique." This consists of letting nature take its course. Assume that you face a student with whom there is a modest chance to get acquainted. In due time several persons note that he is industrious, a hard-working fellow, though other remarks differ. John's industry is a characteristic which floated; it rose to the top like cream. Observers are free to note salient charac-

teristics. Also, they are part of their own descriptions, so the initials of observers are noted with all records. Some observers are severe, some charitable, some accurate, some casual, and some devious.

THE "FLOTATION TECHNIQUE" is worth a second look. Successful descriptions of students' work may require that all lurking psychologists or educationists be locked outside. Most of them by virtue of their professions endorse a descriptive system, but they dote on orderly charts. If I say John is industrious, they will put down "industry" on a chart with six columns after it and demand that I use six grades of industry and apply it to each student. This is an exact opposite to the "flotation technique." Characteristics worth noting for each student will float to the top and only these are worth recording. Schemes and charts are wrong in principle and hamper the process. Industry is one of John's salient characteristics and perhaps one or two other students in the class may be conspicuously industrious or lazy. However, weighing this characteristic for each member of the class nullifies the whole principle, wastes time, creates an unhealthy environment, and is utterly futile. Instead of bringing out the salient points it buries them, meanwhile sterilizing the staff both as to powers of observation and as to interest. The fellow next to John may be notably theoretical, another will be conspicuously able with his hands but slow in reading, a third will rattle his quick mind in most uncertain fashion, and so on. The next student noted may be the only one who is called notably meticulous. The salient characteristics of each student will take care of themselves, if they are allowed to do so.

The descriptive outlook is not difficult to tie in with the more familiar one. The orthodox grader seeks to apply a scale to his students, asking only the question, "How good is he?" When John is given 76, his position on the scale is fixed with apparent precision but why it is not 50 or 100 you have no idea. The use of charts with graded degrees of characteristics is really a modification of grading, the fault that the chart proposes to overcome.

Teachers, administrators, and registrars who are fond of rules and systems, and many are, are nervous about the suggestion that the gates be opened to free expression and concentration on real issues. To them chaos is being advocated. That I am opposing domination by rules is true, but I am not advocating chaos. Answers taken from experience seem to provide a defense against charges of chaos. Our records on over 5,000 students of all sorts have evolved from completely graded records to the present descriptive system. On current departmental records four entries appear, two for midterm examinations, one for a final examination, and a closing entry we call "comments." We write extensively on midterm examinations but a descriptive comment, both for the students and the records, is put at the top of each paper and initialed. The record shows that two observers read this particular examination that I quote, and I can tell who they were. One observer said: "Standard but too orthodox, too unimaginative, and too idealistic for me. Try standing alone." The other said: "Narrow and stereotyped. Try for a wider angle." The student also knows who made the comments and, if he chooses, he can inquire or interpret accordingly. His rank relative to his neighbor cannot be considered. Students face three competitions, with the teacher, with fellow students, and with the subject. The principal competition, that between student and the subject, takes its proper paramount position.

At the end of the term each member of the staff, working independently, writes comments on the talents and performances of students. Comments on a medical student, chosen at random, read as follows: The first observer says: "Estimated as the perfect conscientious student, needing fire-crackers and other explosions to get him going in human relations." The second said: "Very quiet and unassuming, but an intelligent, perceptive student and a steady competent worker." The third only put down a question mark. The fourth observer said: "Reticent; keeps out of the way. No positive impression." The fifth said: "Quiet and retiring, pays attention to business at hand, and seems to have understanding." The sixth said: "No comment." Note how a few salient characteristics have floated to the surface and how you can think of him as a person. Together they make something of a descriptive picture of the student and his performance. A record of 76, 92, 81, and C, rough translations of these comments, gives no impression of this fellow. With descriptive records, letters of recommendation become straightforward and easy. The Dean has specific information when problems arise. Deans on occasion have called for our records and a current dean has recently required all

departments to turn in descriptive comments on each student. Frankly subjective, descriptive records attain a higher degree of charitable objectiveness than do grades. Grades, of course, are also subjective but they offer the teacher a screen behind which to hide. Imperfect as they are, individual comments concern Mr. X, not his relationship to his fellow students.

In spite of scars derived from the intimacies of our experiment and the inadequacies in our methods thus far, the descriptive approach still seems to me to be forthright and direct. We who teach work with the students while they learn. We need a record of sorts, but the record is not in itself an end. Careful study shows that with more than half of each class we would do well with no records, but since we never know which half we cannot take advantage of this. The use of the English language to say what we mean seems far more reasonable than an effort to use a few symbols which disguise and distort as well as injure. Each student is a neighbor and an individual, calling for a record which is specific, not relative, and descriptive rather than graded.

If the principle is correct, can the results be accepted? That, no doubt, depends on whom you ask, and each department needs latitude in interpretation. However, we have used a descriptive record, not grades, for over a quarter of a century with medical, dental, pharmacy, nursing, and science and art students, both graduate and undergraduate. The advantages have been evident, drawbacks do exist, but no evidence of trouble administratively, pedagogically, or socially has appeared. But please do not misinterpret this: there have been some debates. The urge to operate a dictatorship managed by the teacher is strong. The urge to condemn or reward is strong. The urge to reduce innately complex ideas to simplified systems is strong. Even the urge to use symbols is strong. Some of these urges are unworthy but not one of them is actually denied in the principle or method of description. The principle expressed asks only that teachers use their own words to say what they mean instead of trying to make significant observations by using inadequate symbols, and that they work democratically with each student instead of endeavoring to judge worth in superior proclamations. I once wrote an article which was published, but the title I had used was changed. I had it: To GRADE OR NOT DEGRADE. It came out, of course: To GRADE OR NOT TO GRADE. I didn't even argue with the editor. The topic involves our conceits, and is, after all, a little ticklish.

Through Trip

"Instead of making a through trip from New York to Chicago without change and with suitable stops, no traveler would profit by changing every hundred miles to an independent road with a different gauge of vehicles, different passenger regulations and a different coinage with which to regulate transportation. Full parallel is the mental delay and friction arising during a student's journey through the hands of fifty teachers who, instead of helping him toward a single intellectual goal that he might clearly see and aspire to reach, severely hold him up for the satisfaction of tasks devised by themselves for the purpose of appraising and rating his efforts to swell an arbitrary credit account."

WILLIAM S. LEARNED
The Quality of the Educational Process in the United States and in Europe
New York: Carnegie Foundation for the Advancement of Teaching (Bulletin 20). 1927. Page 45.

"The Vision of Excellence"

EDUCATION FOR CREATIVE LIVING by Frederick Mayer. New York: Whittier Books, Inc. 1959. 157 pp. $3.00.

THE IDEA OF A COLLEGE by Elton Trueblood. New York: Harper & Brothers. 1959. x + 207 pp. $4.00.

TWO MEN, both philosophers and teachers, have written books which, though differing in many ways, have important things in common. Perhaps the most important idea that they both stress is that we do not expect enough of our students. Trueblood says

> . . . we do not sufficiently encourage students to live up to their possibilities. Our problem is not lack of native ability, but lack of challenge . . . Great numbers of college students admit that they are coasting along during most of the weeks of the college year, employing only a small part of their native resources. Poor little papers, written at the last possible minute, are handed in by people who have the ability to write really good papers. The tragedy is the tragedy of failure to realize potentials.

And Mayer says

> . . . we must intensify our work . . . It is undeniably true that we are wasting many years of education today by spoon-feeding and by underestimating the capacities of our students and teachers.

Merely making the work harder is not the idea. In many places a tightening up of college work is doubtless occurring without realization that the real need is for *challenge*. Working a student hard is better than letting him loaf, but there is a higher level of learning that is imperatively demanded in our college and university teaching today. Trueblood devotes a chapter to "the vision of excellence," in which he declares:

> The place to begin in our educational philosophy is a change in purpose. We must make our goal, not adjustment, and not even happiness, but excellence. We may, indeed, achieve happiness in this way, but the happiness will come as a by-product rather than something at which we have directly aimed. Young people who begin to have a taste of what excellence in performance and production may mean often discover that this brings a joy and satisfaction which are not known to mediocrity, no matter how much entertainment is provided. Though many students of today do not know it by experience, the truth is that the joy to be found in writing a good essay, striving for genuine competence rather than for a passing grade, is a great joy. This is because man is made to be a producer. We are happy when we *make*, and we are happiest when we make at the level of excellence.

Dr. Trueblood, now professor of philosophy at Earlham College, was formerly professor of the philosophy of religion and chaplain at Stanford University (I heard him preach each Sunday for a year while a student there.) He has deliberately chosen the title of his book from Newman's famous essay "The Idea of a University," and the text stands up well in the inevitable comparison. In a dozen chapters he discusses the college in America, the concept of a Christian college, teacher and student, administration, curriculum, liberal and vocational education, the education of men and women, the college as a community, the college in the community, the achievement of academic integrity, and finally the vision of excellence.

He condemns the cult of mediocrity which, he points out, is deliberate *limitation of achievement*, "a terrible and frightening thing when it appears in industrial establishments, but . . . far more frightening when it appears in educational establishments." It produces a campus climate as deadly to learning as a miasmal swamp. "Many students do shoddy work for the simple reason that they are ashamed to do their best and thereby make an implicit criticism of their unambitious fellows."

Instead of attempting in any degree to present a digest of this book, let me rather recommend it for reading by even the busiest professor and administrator. He need not agree in all cases with its handling of controversial or other topics, but he will find intelligent, discerning, and creative treatment of the most important current problems of colleges and universities. If the message of the book must be stated in a few sentences, here they are:

> It is the colleges, more than any other institutions, which must provide constant reminders of the difference between greatness and mere grandeur or bigness. The specter which haunts us is that of triviality in the houses of grandeur. We cannot produce, on order, human beings of the caliber of Churchill or Wilson, but there is something that we can do, if we will. We can provide an atmosphere in which some people of potential worth will develop powers which otherwise would never have been recognized even by those who possess them.

Dr. Mayer, professor of philosophy at the University of Redlands, now gives us his fourteenth book on philosophy and education. It is a

compact volume of fourteen chapters in which education for creativity is advocated and described. "Suspended between a period which we cannot recover and an age which as yet we cannot comprehend," we need, he says, "to create an enlightened leadership . . . and an appreciative audience dedicated to culture, to the living ideals of education."

Equally with Trueblood, Mayer rejects the cult of mediocrity:

> . . . we must do something about the atmosphere of our colleges and universities. At the University of Redlands we are starting a leadership program, and we are bringing to our campus such men as Frost and Neutra. They will lecture for an hour and then hold a discussion and bull session. We feel this is one method whereby the student realizes that education is the vision of living greatness.

While earnestly upholding goals of creativity and high achievement, Dr. Mayer does not restrict higher education to a selected elite. We cannot reserve our campuses to the highest 15%, he says, becase we do not know who the latter are.

> I have known C students who were quite lethargic in college and they became great after they had graduated. I remember one boy especially. He was a conscientious objector to learning. I asked him why he came to college and he said, 'I want to be a success.' He thought it was unfashionable to get good grades. In his senior year he changed. He took his law degree at the University of California, and today he is one of our outstanding lawyers. Certainly, he was not part of the intellectual elite.

Mayer's view is the opposite of restriction. He would have ultimately "as many students in college as are attending high school today." But he stresses hard work, discipline, creativity, and maturity. "In the future we shall have to work our students far harder, in a far more intense way, than we have ever done before." We should develop a new program for gifted students, expand educational television, stimulate learning at all levels, fight materialism in education, establish "new super-graduate schools" which will bring together the most creative students and the most profound professors."

Several of Mayer's chapters are individual gems. Let every one of us, for example, read the final chapter "Farewell, Dear Teacher," giving a picture of a professor whose last words were: "Don't forget that we are the surgeons of the spirit and the conscience of civilization."

There is an interesting contrast in the implications of these two books in respect to the role of the professor. Trueblood's chapter on the teacher is excellent in its interpretation of the place of the professor in the educational scheme. Good teaching is our pearl of great price. "The greatness of any college is directly proportional to the number of its teachers who are truly effective in this sacred function." But in discussing the actual teaching process, Trueblood does not see beyond lecturing and the use of discussion. (He mentions recitation but rejects it except as applicable in the tutorial hour.) He says the lecture "has not been outmoded by the invention of printing or of radio or television or by any other known device," and he does not deplore this. He continues: "In each college generation some one comes along to say that lecturing is no longer valuable, but his point is continually refuted by the experience of those few professors who know how to lecture, both artistically and effectively."

In contrast, Mayer says: "The average college teacher is a failure as a lecturer." Can Trueblood's "few professors who know how to lecture" justify his complacency with lecturing as a mode of teaching? Mayer does not reject lecturing, but he displays broad concepts of the role of the teacher: "What is important is that we develop a feeling about ideas" and "a passion for wisdom." "When education becomes creative, it is like a drama." "Ultimately in the educative process the teacher becomes unessential." The implications of these statements are important.

Every professor must decide for himself whether lecturing or any other of the dozens of ways to teach may be best at a given time for a given purpose. But a vision of excellence can be extended to the task of teaching itself. No one with such a vision will want to employ any particular teaching procedure merely because that is the way he was taught. He will be zealous throughout his teaching life to find those ways most effective in awakening his students to their highest potential, equiping them for the richest living, and inspiring them with the highest vision.

Time for a Change?

TEACHING FOR SELF-EDUCATION by Paul Douglass. New York: Harper & Brothers. 1960.

ISSUES IN UNIVERSITY EDUCATION edited by Charles Frankel. New York: Harper & Brothers. 1959. xiv + 175 pp. $3.95.

"Oh, sure, I've received good marks and all that, but I've never really had to work hard. Now that it's all over I feel as though I've been cheating myself, or maybe I've been cheated. I've never really been pushed." That statement is right out of the student's mouth, and from a good grade getter at that.

And then, right out of the professor's mouth (we've heard it over and over, we've said it): "Of course, I realize my students are all different, but I have so many of them I have to treat them all alike."

Unindividualized teaching inevitably produces what the student said: a sense of cheating or being cheated. Students are not iron filings to be moved by a teacher magnet. If they were we could be robot teachers. But *students, even of apparently similar attainment, should be treated with sufficient flexibility to insure for each the opportunity to satisfy the needs and manner of growth that are strictly personal to him.*

This is the conviction of William S. Learned whose views on teaching and learning, presented in clear and challenging publications over a period of a generation (1911-1943), are now concisely interpreted by Paul Douglass. The author believes that "in due time William S. Learned will go down in the history of higher education as one of the few major influentials—one of the originative minds."

Learned was a prophet crying in the wilderness. What he said was revolutionary and would require courage and resolute purpose to follow, but the people in position to lead in radical change were too involved in the traditional academic strait jacket even to read him. A Harvard friend, in apologizing for not having acknowledged one of Learned's monographs, made no pretense of having read it but said he had seen it in a President's office and was impressed by his brief glimpse of it. Abraham Flexner wrote that he did not know how it happened that he did not acknowledge it. The President of Harvard, after a year of silence, wrote Learned that he had distributed copies to the members of the Harvard Corporation, but he made no comment on the central thesis of Learned's book.

Learned's views were matured by thinking over a long period and were supported by a vast amount of authoritative research conducted through the Carnegie Foundation for the Advancement of Teaching and the Carnegie Corporation of New York. He expressed himself in clear language that cannot fail to arouse a reader. His illustration of the race track penetrates through our plethora of requirements, credits, courses, and marks to reveal the individual student as the inescapable concern of college and university. He insisted that the college must define goals as clearly as the track coach. It must get the student's eye steadily fixed on them, must see that "before each runner there lies an ample, unobstructed course whereon, without waste of time or effort, his full powers can operate to express whatever of worth there may be within him."

"Even a foot race provides a separate lane for each contestant," said Learned. "The college can do as much."

The purpose of teaching, he said, should be to catalyze genuine self-education. In order to endure, an education must be self-achieved. Give the student a man's chance at ideas. Strip away the paternalistic supervision that chokes his interest and impedes his growth. Learned said that

> the crux of the entire process rests in the responsibility of each individual for recognizing and appropriating that which will best fit his need as he can be brought to see it . . . In general, it is a regime that contemplates education as a searching, informing way of life as a whole for students who have their work in clear focus and are operating under their own power.

Strangely enough, in this era when millions of students are about to overwhelm us and we might expect the individual once and for all to be lost in the flood, we find an awakened interest in utilizing rather than disregarding individual differences. Intelligent provision for the more gifted has become a general movement. Flexibility in the curriculum is being eloquently advocated. The recent study from which the student quotation is taken reported that "our experience with students and faculty members suggests that expectations are

best established by starting with the student where he is (and that will vary widely) and encourage him to perform to the outer limits of his capacity (which also will have wide variations)."*

If our era is the time for a change from lockstep to individualization, Paul Douglass's book is a chart for the future of college and university teaching and learning. It sees and interprets the function of education in our democracy. It quotes Learned: "Our opportunity as a nation is without precedent. We are called upon to produce on a clean soil an education that is sincere and sound, that values each differing mind, and with every encouragement, offers it advancement to the limit of its capacity."

The book proceeds through ten chapters, the first presenting Learned as an educational iconoclast, studying, thinking, and developing his convictions through the years. It portrays the teacher, the librarian, and the student as cooperating professionals. It gives in detail the power potential of the student when he accepts responsibility for his own self-education, inspired, aided, and guided by his teachers. Other chapters are: Admission to College (Continuous Intellectual Voyage and Present Worth), College and Freshman (Preceptorial Semester), Alien Requirement (Ritual of the Mark), Graduate Record Examination (Profile of Permanent and Available Equipment), Learned Among His Contemporaries (Place of the Mind in the World of Machines and Experts), Exploration of Applications (Toward an Administrative and Faculty Agenda), Structural Influence in American Education.

How can the educational standards and procedures of the past and the immediate present possibly serve the educational needs and demands of a global, atomic, Sputnik age? Televised teaching and many other aids to teaching will be needed increasingly to serve the great student bodies of the future. But the individual student will remain as the inescapable unit of teaching and learning. This William Learned emphasized unceasingly while he lived. Paul Douglass with discernment and sincerity now presents Learned to us at a time when drastic change in our thinking and our teaching is needed, and he shows us a direction we had better not miss.

Fresh from the Douglass book, I turned hopefully to the new *Issues in University Education*, which "distills the experience of many scholars [foreign and American] who have worked and studied in American colleges and universities and who have met together at various places in the United States to discuss the American systems of higher education." Scholars associated with visiting foreign professors would be challenged, one should think, to some new conceptions of teaching for this modern age.

The book is important and distinctive with chapters each contributed by a different scholar: Paul J. Braisted, Robert B. Brode, Charles Frankel, John Hope Franklin, Richard McKeon, Sigmund Neumann, J. Robert Oppenheimer, Robert Ulich, Irwin T. Sanders, Robert M. Strozier. The reader may pick his own favorite chapter. The Oppenheimer chapter is thrilling in its discernments and prophecy. The Ulich chapter provides a basis for a philosophy of higher education. The book declares the importance of universities and their transformation with changes in society due to technology and the growing aspiration to satisfy basic needs. It interprets the truly decisive changes and movements in the history of higher education as caused by the fact that "universities are the living incorporations and symbols of man's insatiable thirst for truth." It discusses science and the human community, the democratization of educational opportunity, the responsibilities and freedoms of the scholar, the university and society, university services to students, the meeting of minds and the making of a scholar. It summarizes current issues.

Is it unreasonable to look for, at least in the chapter on the responsibilities of the scholar, some consideration of teaching? That the scholar commonly teaches is assumed: "he enjoys the congeniality and stimulation provided by his academic colleagues and by the students." But being a good teacher is not mentioned as one of his responsibilities. There is little allusion to teaching in the book. Can it be that none of the writers questions the idea, inherent in so much academic discussion, that good teaching is merely a function of scholarship?

The writers are not unaware that teaching is concerned with student development. There is early reference to "the bearing of education on the lives of individuals." Mention is made of "problems of how the potentialities of individuals may best be developed." The American college is recognized to be "not merely a scholarly, it is also an educational, institution." Every individual, it is asserted, "irrespective of birth, class, and wealth, has the

* Eddy, Edward D., Jr. The College Influence on Student Character. Washington, D. C.: American Council on Education. 1959. Page 9.

What Teachers Should Know About Counseling

A review by ORDWAY TEAD

THE FACULTY IN COLLEGE COUNSELING by Melvene D. Hardee and Orrin B. Powell, New York: McGraw-Hill Book Company. 1959. xi + 391 pp. $6.75.

PROFESSOR HARDEE has written a timely and needed book on an exigent theme: the organic relation of college teachers to the student counseling process. No doubt more of this is done informally than is formally recognized. But that the process should have explicit acknowledgment, training, and conscious equipment for the role, is less usually recognized. All of this is here spelled out with perhaps unnecessarily elaborate treatment. But the college teacher who will master these pages will have his reward.

From my own knowledge of college teachers, however, I have the reservation that too few will open a volume of this dimension (391 pages) and this price ($6.75). It is in a way a pity that those who have the expertise do not ask themselves first, "What will be read on the topic by its rightful audience as persuasive and informative?" rather than "What do I know that teachers should know, too?"

This book is vastly informing but will its rightful audience pick it off the college library shelf and profit by its wisdom?

The argument for faculty skill in helping the almost inevitable counseling relations which will spontaneously come their way is here advanced with a formidable body of evidence, argument, and methods. There is a real situation of tension between the professional counselors and the actual teachers. Cannot the counseling role of the teacher be set forth without too much reductionism so that a book can in not more than 60,000 words give the intransigent but hard-ridden college teacher the juice of his subject?

The teacher cannot avoid a guidance role and to have it wholly amateur is a pity in the interest of true learning. The book is unqualifiedly competent to remedy this condition. But the editorial judgment as to how to get college faculties to read it has perhaps not been too wisely manifested. I commend the volume, however, to college teachers who would broaden and deepen the learning experience of their students.

OTHER NEW BOOKS

THE ALIVE AND GROWING TEACHER by Clark E. Moustakas. New York: Philosophical Library. 1959. 157 pp. $3.00.
"A theory of human relatedness and a portrayal of persons working together"

THE ATOM AND THE ENERGY REVOLUTION by Norman Lansdell. New York: Philosophical Library. 1958. 200 pp. $6.00. 32 plates.
"Its purpose will have been served if it convinces the reader of his own need to understand the implications of the energy revolution and stimulates him to find his own answers."

AUTOMATION, CYBERNETICS, AND SOCIETY by F. H. George. New York: Philosophical Library. 1959. 283 pp. 4 plates, 23 figures. $12.00.
"Control and communication systems, applied cybernetics (automation), operational research and automation." The book closes with "some of the frankest speculation" and a warning that "science is the slave of humanity and must never be its master."

Time for a Change—*continued*

right and duty to develop the humanly desirable potentialities in his personality as fully as possible." These things are said, but apparently it is sufficient if the professor knows that development of the individual student is important. Central to him is his scholarship, not his teaching.

But when a university or college undertakes to *teach*, when a scholar undertakes to *teach*, the development of individual students becomes central; the speciality becomes a means—an indispensable means, but yet a means. To teach in college or university one needs to be a scholar, but he also needs to be a teacher. Is not teaching something more than possessing and somehow transmitting knowledge? Is it not rather the using of knowledge for the making of men? Is not the improvement of teaching, of the technology of using knowledge in the development of student potential, one of the issues in university education? Or is our teaching so good that it needs no improvement?

All the concerns of higher education—the advancement, the dissemination, the preservation of knowledge, the fostering of arts and creative thought, the conquest of the universe and the realization of human destiny—need the attention of the best minds. But the gap between what Learned preached and worked for and what these chapters by distinguished scholars are preoccupied with, to the exclusion of teaching and its advancement, is something sobering to note. Is it time for a change?

BUILDING A BETTER VOCABULARY by James I. Brown and Rachel Salisbury. New York: The Ronald Press Company. 1959. 124 pp. Paper. $2.25.
"College students today need a vocabulary one-third larger than did their counterparts a hundred years ago." For students but many a professor might use it to his own advantage.

THE CHALLENGE OF SCIENCE EDUCATION edited by Joseph S. Roucek. New York: Philosophical Library. 1959. 491 pp. $10.00.
"Survey by thirty distinguished collaborators of the cross currents of thinking on all major educational practices in the field of science in America and abroad."

CLOSED-CIRCUIT TELEVISION, Progress Report by the Board of Education, Haggerstown, Maryland. March 1959. 50 pp. Paper.
Illustrated report on a Fund for the Advancement of Education television teaching project 1958-1959.

CONTROVERSY: READINGS TO STIMULATE THOUGHT AND DISCUSSION, edited by Randall W. Hoffman and Robert Plutchik. New York: G. P. Putnam's Sons. 1959. 215 pp. Paper. $3.50.
Planned for freshman orientation in what college is for, tools of learning, leadership, students' relationships. Contributions by nearly fifty notable authors. Aim "to challenge rather than inform" and hence the most shocking aspects of topics tend to be presented rather than all sides."

CROWN AND PARLIAMENT IN TUDOR-STUART ENGLAND by Paul L. Hughes and Robert F. Fries. New York: G. P. Putnam's Sons. 1959. xvi + 359 pp. $6.95.
Documentary constitutional history 1485-1714 with introductions. Extensive bibliography and excellent index. Beautifully printed, fascinating to read.

DICTIONARY OF THOUGHT by Dagobert D. Runes. New York: Philosophical Library. 1959. 152 pp. $5.00.
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EDUCATIONAL PSYCHOLOGY AND CHILDREN by K. Lovell. Foreword by P. E. Vernon. New York: Philosophical Library. 1959. 272 pp. $6.00.
Author credits professors and students with "the inclination and the capacity to study fundamental theories and important experimental findings. He does not gloss over controversies among psychologists nor gaps in our knowledge."

I CHOSE TEACHING by Amos Lee Herold. San Antonio, Texas: The Naylor Company. 1958. 255 pp. $5.00.
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JOHN DEWEY'S CHALLENGE TO EDUCATION by Oscar Handlin. Foreword by Arthur G. Wirth. New York: Harper & Brothers. 1959. 59 pp. $2.50.
Number Two of the John Dewey Lectureship. "Not concerned with eulogizing the man but succeeds in casting useful light on a significant moment in our educational history."

MODERN ELEMENTARY SCHOOL: CURRICULUM AND METHODS by Wilbur H. Dutton and John A. Hockett. New York: Rinehart & Company, Inc. 1959. xii + 530 pp.
"To help prospective teachers and experienced teachers understand some of the important improvements which are being made in teaching and the curriculum at the elementary school level."

MODERN SECONDARY EDUCATION by William M. Alexander and J. Galen Saylor. New York: Rinehart & Company, Inc. 1959. xiii + 765 pp.
"Designed as a source of information and ideas for all who work or plan to work in secondary schools." Illustrations, graphs, statistical data.

MODERN SLIDE RULE by Stefan Rudolf. New York: The William Frederick Press. 1959. 58 pp. + appendix. Paper. Illustrated. $5.00.
"For the first time, the simplified rules for fundamental slide-rule operations. An original method."

PICTORIAL HISTORY OF PHILOSOPHY by Dagobert D. Runes. New York: Philosophical Library. 1959. x + 406 pp. $15.00.
This book is monumental and could not be over-praised. The superb pictures and the terse textual interpretations make vivid the story of "man's orientation in the cosmos."

PSYCHOLOGY FOR BETTER LIVING by Lyle Tussing. New York: John Wiley & Sons, Inc. 1959. xii + 496 pp. $5.95.
Any professor not versed in psychology would find this book interesting reading. Intended as a practical book for students in meeting the problems of everyday life. Illustrated.

PSYCHOLOGY OF ADOLESCENCE by Luella Cole. New York: Rinehart & Company, Inc. 1959. xviii + 731 pp. $7.00.
Fifth edition in association with Irma Nelson Hall. Improvements and extensions should increase still further the usefulness of this tested book by a widely known author and authority.

READING GERMAN FOR SCIENTISTS by Hans Eichner and Hans Hein. New York: John Wiley & Sons, Inc. 1959. xi + 207 pp. $5.25.
"Designed to serve the needs of the student who wants to be able to read German scientific texts and wishes to reach this limited aim by the shortest route." How to read German, readings in chemistry, readings in physics.

SCIENCE FOR LIVING: Laboratory Exercises by Cortland R. Mapes. Dubuque, Iowa: Wm. C. Brown Company Publishers. 1959. x + 211 pp. Paper. $3.50.
Outline of lectures and laboratory exercises in human biology.

SCIENTIFIC RUSSIAN by George E. Condoyannis. New York: John Wiley & Sons, Inc. 1959. xii + 225 pp. Paper.
"Designed to be used in conjunction with scientific and technical reading matter and with a dictionary." "Basic structure of the language presented in a form tailored to the reading aim."

SMALL-GROUP DISCUSSION IN ORIENTATION AND TEACHING by Randall W. Hoffman and Robert Plutchik. New York: G. P. Putnam's Sons. 1959. xiv + 168 pp. $4.00.
In Foreword, Dr. Esther Lloyd Jones says: "I suspect—and the authors hope—that its most profound effect may be in helping college professors create college experiences that will make the most of students."

TEACHING: A PSYCHOLOGICAL ANALYSIS by C. M. Fleming. New York: John Wiley & Sons, Inc. 1958. xiii + 291 pp. $5.00.
"The teacher as a student of motivation, as a promoter of learning, as an observer of growth, as craftsman and technician, as experimenter, as administrator and therapist."

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WHO'S WHO IN ASSOCIATION OF UNIVERSITY EVENING COLLEGES 1959. Published by the Association. Gurth I. Abercrombie, editor.
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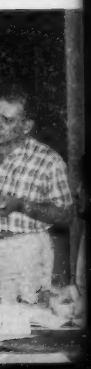
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